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Extended Deterrence and Arms Control

A Collection of Conference Papers

Nanette C. Gantz, editor

40 Years 1948-1988

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May 1988

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PREFACE

The Ford Foundation provided a grant to The RAND Corporation to support a variety of projects aimed at expanding international ties between RAND and foreign governments and research institutes. As part of the grant, RAND hosted a conference in San Diego, California on March 24 to 26, 1986, entitled *Extended Deterrence and Arms Control.* The conference brought together 22 government officials and defense analysts from the Federal Republic of Germany, France, Great Britain, and the United States. The Ford Foundation provided funding for the U.S. participants. Conferees from the three other countries were sponsored by the Stiftung Wissenschaft und Politik (FRG), the Institut Français des Relations Internationales (France), and the Royal Institute of International Affairs (Great Britain).

This report is a collection of papers presented at the conference. It should be of interest to analysts working on political and defense issues. The views expressed by the authors should be regarded as personal ones, not necessarily representing those of any government or private organization.

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I. INTRODUCTION

by Nanette C. Gantz

In March 1986, The RAND Corporation, the Stiftung Wissenschaft und Politik, the Institut Français des Relations Internationales, and the Royal Institute of International Affairs sponsored a conference in San Diego, California on Extended Deterrence and Arms Control. The conference brought together 22 prominent defense analysts and government officials from the Federal Republic of Germany, France, Great Britain, and the United States to address the continuing adequacy of and requirements for extended deterrence and related arms control issues.[1]

This report is a collection of conference papers,[2] which have not been updated since March 1986 and thus do not account for changes in East-West relations and arms control. The Reagan-Gorbachev summits in Reykjavik and Washington, D.C., the double zero agreement on U.S.-Soviet intermediate range nuclear weapons in Europe, and the continued discussions at the Strategic Arms Reductions Talks (START) and the space and defense talks would have obviously influenced, if not considerably altered, the assessments made in these papers. Nonetheless, many of the issues raised remain relevant to the ongoing debate about European security and arms control.

The conference was divided into five sessions: (1) Extended Deterrence and U.S. Strategic Force Doctrine and Modernization, (2) Extended Deterrence and Western Doctrine and Forces, (3) The Soviet Union and Extended Deterrence, (4) Extended Deterrence and the East-West Political Conflict, and (5) Future Options for Geneva. Each session included formal presentations and a discussion. The conference focused on the Geneva nuclear and space talks between the United States and Soviet Union, the central issue being the relationship between U.S./NATO arms control policy on one hand and broader Western security interests and requirements on the other. Specific questions included: What are our options? Where can we be flexible? Where must we stand firm?

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[1]The concept of extended deterrence refers to the U.S. guarantee to use strategic nuclear weapons in response to Soviet aggression in Europe. Flexible response is the NATO strategy that, among other things, implements extended deterrence through a strategy of escalation.

[2]See the companion report, Nanette C. Gantz, *Extended Deterrence and Arms Control: A Conference Report*, R-3514-FF, March 1987, for a summary of the conference discussions and presentations.

Sessions I and II papers describe Western efforts to respond to Soviet political and military strategy. Franklin Miller's paper examines the contribution of the Reagan administration's strategic modernization program to NATO's strategy of flexible response. He argues that for the United States to meet its NATO commitments, it must possess the ability to hold a range of Soviet targets at risk and sufficient forces to execute a spectrum of escalation options. He contends that despite several challenges (Gramm-Rudman and the offense-defense force debate) the United States will be able to meet these requirements through the planned modernization of command and control, sea-based forces, land-based forces, and bombers. John Roper and Phil Williams approach the adequacy of U.S. extended deterrence in terms of what deters Soviet aggression in Europe: the presence of U.S. nuclear weapons or their presence plus details about the force size and composition. They argue that most European nations are not interested in the details of U.S. strategic forces (such as target coverage) as long as there are not obvious disparities between the United States and the Soviet Union. However, the combined elements of the U.S. commitment—large ground force deployments in Europe, INF deployments, and strategic forces—remain essential to the credibility of *flexible response.*

Robert Alston and Uwe Nerlich then review the adequacy of the other elements of Western deterrence. Alston briefly reviews the evolution of NATO's nuclear doctrine and force posture. He concludes that NATO's doctrine and posture continue to be viable, although serious challenges loom on the horizon. Uwe Nerlich examines the contribution of French nuclear forces in three areas: Western deterrence, plausible defense contingencies, and European security negotiations. He argues that France built its nuclear forces primarily to increase French autonomy from the United States and to enhance France's political standing in Europe. However, he suggests that France should be more concerned in the future with its role in executing NATO's strategy of flexible response, since France's fate is ultimately tied to NATO.

The papers presented in Sessions III and IV describe the evolution of Soviet military and political strategy toward the West. Dennis Gormley and Hartmut Pohlman address the military dimension of Soviet strategy. They provide a comprehensive examination of changes in Soviet strategy and force structure, especially as the changes have been conditioned by Western strategy and force structure. Gormley provides a detailed historical analysis of Soviet efforts to enhance the flexibility of their forces by developing options ranging from massive nuclear strikes to conventional-only conflicts. Pohlman focuses on the

broad trends in Soviet operational thinking and force development over time. Both papers reach a similar conclusion: The Soviets have developed a range of nuclear and conventional capabilities that could undermine the West's ability to execute its strategy of flexible response. In the companion political assessment, John Van Oudenaren outlines the evolution of Soviet political strategy. He contends that one of the chief Soviet objectives since the end of World War II has been to minimize or eliminate the U.S. political and military influence in Western Europe. The Soviet Union has used several mechanisms, including propaganda and arms control initiatives, in an attempt to deprive Western Europe of independent security options and to undercut the credibility of extended deterrence.

Finally, the papers presented in Session V address questions regarding future Western arms control strategy. Edward Warner and David Ochmanek review the status of U.S.-Soviet negotiations on strategic offensive forces, defense/space weapons, and INF as of June 1986. Based on objectives each side pursues in arms control, they then explore a range of possible compromise outcomes for each set of talks. The alternatives presented suggest that there may be opportunities for compromise between the U.S. and Soviet positions, provided that both sides can make certain concessions. Pierre Lellouche assesses the Geneva negotiations from a European perspective and examines the implications of SDI and nuclear arms control trends for Europe. He argues that two issues could undermine alliance cohesion and security: the avoidance of an alliance discussion of the strategic issues related to the Strategic Defense Initiative (SDI) and the relationship of INF talks with other Geneva negotiations.

II. U.S. STRATEGIC FORCE MODERNIZATION

by Franklin C. Miller[1]

PROLOGUE

I was asked to address the modernization of U.S strategic forces within the context of extended deterrence. Before I do so, however, it would be useful to indicate the definition of extended deterrence used here. In the broadest possible sense, extended deterrence involves the commitment of American military power in all of its forms to the defense of allied interests. I will focus on (solely to maintain this discussion within reasonable bounds) what Robert McNamara described in his 1962 statement "we have undertaken the nuclear defense of NATO on a global basis"—the credible commitment of U.S. strategic nuclear forces to NATO's policy of deterrence and defense. In choosing this limited focus I do not intend to demean or overlook what are in essence key elements of both deterrence *and* extended deterrence: a robust conventional force posture and a credible nonstrategic nuclear capability that includes risk-sharing and burden-sharing. Indeed, U.S. appreciation of the linkage between these elements and what has been termed "NATO's ultimate deterrent" has grown over the recent past, as evidenced by the following quote from Secretary Weinberger's Fiscal Year 1984 Annual Report:

> deterrence . . . is founded on a clear Soviet understanding that a conventional/nuclear war in Europe risks engagement of the central nuclear systems of the United States. All of our nuclear forces are governed by a single coherent policy that governs the linkage between conventional, non-strategic nuclear, and strategic nuclear forces. There is no separate U.S. policy for non-strategic nuclear weapons.

With these facts acknowledged and recognized—but with discussion of them deferred to another day—let us turn now to an examination of developments in U.S. strategic forces over the past several years.

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[1]The views contained herein are solely those of the author and do not necessarily represent those of the Department of Defense or the U.S. government.

REQUIREMENTS OF AN EFFECTIVE DETERRENT

It would be well to begin by noting U.S. requirements for an effective deterrent. First, our forces must be capable of putting at risk the full range of assets valued by the Soviet leadership. In its basic form, the composition of this target set has not varied greatly since the early 1950s; it includes Soviet leadership and command and control capabilities, both military and political, and industrial economic assets. Over the years, the relative emphasis accorded to particular elements of this target base have varied. Since the late 1970s, our increased appreciation of the importance the Soviet leadership places on nuclear forces, projection forces, the ability to exercise political control, and the industrial potential to sustain war has led to greater attention being paid in our deterrent planning to hold these critical assets at risk. Second, since the introduction of the flexible response strategy by the Kennedy administration, U.S. forces have had to be capable of providing a wide range of possible response options to the President. They must be able to be used selectively as well as on a massive scale, promptly as well as over an extended period of time. In this manner, by demonstrating the capability to respond credibly to any type of attack against us, our strategic forces deter such attacks in the first place.

In 1981, the Reagan administration, like its predecessors, reaffirmed the wisdom of the Flexible Response strategy. Unlike many of those predecessors, however, the administration rejected adopting a new *nickname* (e.g., assured retaliation, countervailing strategy) for U.S. nuclear doctrine on two counts: first, that coining a new descriptive title would invariably lend credence to the mistaken belief that a new *strategy* had been formulated, and second, that the adoption of such titles by previous administrations had obscured the truly important continuity in U.S. strategic doctrine since 1961. As a result, the Reagan administration consciously has been describing our strategy as Flexible Response, and will continue to do so. Because nuclear doctrine must be apolitical, and because public support for and understanding of U.S. policy depend upon public confidence that the basis for nuclear deterrence does not have to change with changes in public office, this course of action has been a wise one.

U.S. CAPABILITIES—1981

Because of a series of developments, however, the Triad of forces upon which we depend for effective deterrence was in need of major overhaul by 1981. A primary factor was that the bomber and submarine legs represented largely the capital investment of the early 1960s:

- The B-52 force was aging (the youngest B-52 was about 20 years old), its ability to continue to penetrate Soviet air defenses was declining, its base escape time was insufficient, and the 60-odd FB-111s that had been added to SAC in the early 1970s carried small payloads and were fairly short-legged (and therefore tanker-intensive);
- A new sea-launched ballistic missile (SLBM), with a 4,000 n mi range, the Trident I, had been retrofitted into 12 nuclear-powered ballistic missile submarines (SSBNs). But the total force of 31 submarines had been built in a block between 1963 and 1967. Block obsolescence of the SSBN force at the 30-year point—and retirement at the same annual rate at which they were added to the fleet—was approaching within ten years; and
- The Minuteman force had been upgraded twice in the 1970s, with the introduction of 550 multiple independently targetable reentry vehicle (MIRV) Minuteman IIIs between 1970 and 1975, and the deployment of the Mark 12A warhead on 300 of these, beginning in the late 1970s. These improvements, however, had been offset by Soviet offensive and defensive activities during the same time period.

In addition to the adverse effects of the increasing age, the military effectiveness of the Triad was undercut measurably during the mid- to late 1970s by the increasing pace and scope of the Soviet nuclear warfighting programs. Soviet deployment of the 668 SS-10 and SS-19 missiles provided the USSR a first-strike capable force with a highly accurate RV-to-U.S.-silo ratio of 5:1. By continuing to improve the detection and intercept capabilities of the world's largest and most sophisticated air defense system, the Soviet military took steps to ensure that, by some point in the 1980s, the B-52's ability to penetrate those defenses would be negligible. The deployment of MIRVed SLBMs increased Soviet capabilities to strike U.S. bomber bases, and the slow base-escape time of the B-52s became especially troubling as a result. Finally, the Soviets undertook a major passive defense program to (1) harden their missile silos and associated launch control facilities to levels well above Minuteman silo figures; and (2) proliferate, disperse, and harden command posts for key leadership and command, control, and communications (C^3) functions. In both cases, the hardening greatly reduced the retaliatory threat posed against these assets by even the most accurate strategic systems. The net result of all these Soviet efforts was the creation of an overall military posture designed to support the Soviet view—evidenced by their military exercises and writings as well as by their strategic force deployments—that in certain

circumstances a nuclear war can be fought and won. The critical U.S. deterrent task of the 1980s was, and remains, to convince the Soviet leadership that, despite their massive investment in strategic offensive and defensive forces, such conditions can never be realized.

The 1981 Strategic Modernization Program—I

These developments formed the basis of the new administration's review of its strategic doctrine and capabilities—a review that led to three general conclusions. First, as noted earlier, the administration reaffirmed Flexible Response as the best method of providing deterrence against Soviet attack. Second, it also reaffirmed that the concept of the strategic Triad—under sharp criticism from some quarters in the late 1970s—provided considerable deterrent benefits and should be retained. Third, it decided that, despite improvements begun under previous administrations (but not yet deployed), Soviet programs were eroding Triad effectiveness and survivability far more quickly than previously realized. The upshot of this last conclusion was a decision to mount a major modernization of the entire Triad, to give it first priority among the administration's defense efforts, and to provide near-term force improvements to offset the unexpected pace of Soviet efforts. In addition, the decision placed the highest emphasis within the modernization program on upgrading U.S. C^3 capabilities: This long-time step-child was in fact recognized to be essential to a strong deterrent, essential to the point that a strong Triad linked by a fragile and vulnerable C^3 system was seen to be a weak deterrent. Accordingly, funds were allocated to rebuild and strengthen the survivability, redundancy, and effectiveness of U.S. sensors and command links.

In its overall scope, the ambitious nature of the 1981 effort resembled the Kennedy administration's across-the-board modernization and expansion of American strategic nuclear capabilities. As noted earlier, this comparison owes much to the fact that the Kennedy administration had largely provided the "capital investment" that preserved deterrence for 20 years; as in any enterprise, however, that investment eventually must be replaced as it ages and obsolesces. Repeated failures to undertake the required major modernization of each of the legs in the 1970s had created the burden of replicating the Kennedy program in the 1980s.

The 1981 Strategic Modernization Program—II

NSDD-12, signed by the President in October 1981, formally initiated the program designed to restore the military effectiveness and

survivability of America's strategic deterrent. The program consisted of several elements within each leg of the Triad and in the area of C^3:

- C^3 Systems:
  - — upgrade existing airborne command centers and reinforce C^3 for enduring force management;
  - — modernize existing missile attack warning systems and construct additional ones;
  - — develop and deploy a new series of strategic C^3 systems to provide a more survivable and enduring network linking sensors, forces, and the national command authorities (NCA);
- Sea-based Forces:
  - — provide platforms to replace the Poseidon SSBNs when they retire by stabilizing of the Trident submarine program at an assured building rate of one SSBN per year;
  - — by December 1989 develop and deploy the Trident II (D-5) SLBM to provide a sea-based, hard-target-capable ballistic missile for the 1990s and the 21st century; and
  - — in the near term, undertake final development of the Tomahawk nuclear land-attack missile (TLAM/N), with initial deployment by mid-1984 aboard selected surface combatants and SSNs;
- Bomber Force:
  - — deploy and maintain both a penetrating bomber and standoff cruise missile capability in the late 1980s and beyond by: (1) continuing to equip selected B-52s with 12 external air-launched cruise missiles (ALCMs) each to prolong the effectiveness of the B-52s, initiating modification of the 95 B-52H for eight internal and 12 external ALCMs, and procuring approximately 3,000 ALCMs; (2) providing both a more survivable (faster base escape) and effective penetrating force for the near to mid term by procuring 100 B-1Bs with a 1986 initial operational capability (IOC) for the first squadron and a full operational capability (FOC) of 1988 for the force; (3) continuing development of the Advanced Technology Bomber (ATB) with an IOC in the early 1990s; and finally, (4) immediately retiring the 75 oldest B-52 aircraft;
- ICBM Force:
  - — deploy 100 Peacekeeper/MX, with at least the first 40 to be placed in existing silos to regain a prompt threat against hardened Soviet assets as quickly as possible; and continue research and development on a survivable Peacekeeper

basing mode in which to deploy the remainder of the Peacekeeper force; and
— begin phased retirement of the 52 Titan missiles.

THE 1981 PROGRAM AS OF 1986

It has become fashionable in some circles to declare that the administration's strategic modernization program is a "shambles." In fact, the strategic modernization program is alive and well and is providing precisely the systems and capabilities necessary to sustain the flexible response strategy throughout the remainder of this century. In light of its critics' charges, the most objective measure of the strategic modernization program's success—or demise—is the degree to which the pace and momentum of the program has been maintained. What follows, then, is a snapshot of accomplishments to date and how it is progressing toward out-year goals.

- C^3 Systems:
  — in the area of tactical warning and attack assessment,
    — new data processing equipment has been installed at the Otis and Beale Pave Paws sites;
    — construction of the new Southeast and Southwest Pave Paws sites is complete and those radars will be operational in FY87, thereby completing full perimeter coverage against SLBM threats;
    — the replacement of the Thule ballistic missile early warning system (BMEWS) radar with a new phased-array system is nearly complete and the scheduled FY87 IOC will be met; additionally, work has begun on a similar modernization of the Fylingdales site;
    — progress continues on the development of the Nuclear Detonation Detection System, and we are working successfully toward an FOC late in this decade;
    — by the end of this year we will have employed a series of mobile ground terminals to increase the endurance of our warning capabilities;
  — with regard to strategic communications,
    — the four E-4B national emergency airborne command post (NEACP) aircraft have been hardened against Electro-Magnetic Pulse (EMP);
    — the first phase of the EMP-resistant Ground Wave Emergency Net (GWEN) linking attack warning sensors, the NCA, and our land-based retaliatory forces will be operational late this year;

- deployment of the DSCS III satellite system continues; the Jam Resistant Secure Communications (JRSC) system, using the DSCS net to link sensor sites, command posts, and the NCA, has been fielded;
- development of the MILSTAR satellite has been accelerated, with the goal of an early 1990s operational capability; similarly, development of the VLF miniature receiver terminals for improved bomber communications is continuing successfully toward an IOC at the end of this decade;
- a Boeing 707 derivative, the E-6A, has been chosen to replace the aging EC-130 as the Navy's TACAMO aircraft, and we are working toward an FY89 IOC.

• Sea-based Forces:
- the Trident SSBN building program has been stabilized successfully, and the goal of producing at least one Trident SSBN per year has been achieved. Six Tridents are now operational, a seventh is completing sea trials, and the eighth will commence trials this summer. A total of 13 Tridents have been authorized, and the FY87 budget contains a request for the 14th;
- R&D on the Trident II (D-5) has continued successfully, and missile flight tests will begin in January 1987. The December 1989 IOC will be achieved;
- The nuclear Tomahawk sea-launched cruise missile (SLCM) achieved its IOC on schedule and is now deployed.

• Bomber Force:
- the air-launched cruise missile program, modified in 1983 to include development and production of the advanced cruise missile (ACM), continues to be highly successful: The planned procurement of the ALCM-B (AGM-86B) is nearly complete, and the ACM program is on track, heading toward a late-1980s IOC;
- the 1982 IOC (one squadron) and 1984 FOC (all five squadrons) for equipping 90 B-52Gs with ALCM-Bs was achieved on schedule;
- modification of the 95 B-52H for cruise missile carriage began as planned in 1985;
- the first B-1B was delivered to the Air Force ahead of schedule and under cost in 1985; we will meet both the 1986 IOC and 1988 FOC;
- the ATB development effort is proceeding well, and we are confident that we will achieve its projected early-1990s IOC; and

- in 1982 we initiated a program to re-engine our KC-135 tankers with the more powerful and fuel efficient CFM-56 engine. Initially, we plan to modify over 300 KC-135s with the CFM-56, followed later by the remainder of the force. The KC-135 Rs—as they are designated after the modification—will increase aircraft refueling capability by about 50 percent, while reducing operations and maintaining costs.

- ICBM Force:
  - Without question, the modernization of the ICBM leg of the Triad was and continues to be the most contentious element of the strategic modernization program, at least in part, because the administration initially sought to continue its predecessors' attempts to solve both the hard-target-kill shortfall and the missile survivability problem with a single system. There is no need to recount that familiar story here, nor to discuss in detail either (1) the Scowcroft compromise, which sought to address the twin issues serially, with deployment of 100 MX in silos to redress the hard-target imbalance in the near term while initiating development of a single warhead, small ICBM (SICBM) for mid- to long-term survivability; or (2) the erosion in 1984–1985 of Congressional support for the MX portion of the compromise. For the purposes of this paper, two points are worth mentioning:
    - first, the actual performance of the MX has exceeded expectation, and the December 1986 IOC of ten missiles on alert will be achieved; deployment in silos of the remaining 40 missiles authorized by the Congress will continue through 1988; at the same time, DoD is continuing its efforts to investigate survivable modes for basing additional MX missiles;
    - second, advanced development of the new small ICBM has proceeded quickly, and after vigorous competition among several competitors, contracts have been awarded to lead up to full-scale development of the missile and a hardened mobile launcher. Considerable progress has been made toward developing components essential to a lightweight missile that will weigh about 15 tons; similar progress has been made in the area of creating a mobile launcher that can achieve satisfactory levels of hardness. The 1992 IOC for the SICBM remains valid.

FUTURE CONSIDERATIONS

The facts clearly demonstrate that the strategic modernization program is alive and well, has measurably improved our deterrent posture over the past five years, and will, by the end of this decade, as the ACM and D-5 begin deployment and the ATB nears IOC, provide the basis for continued effective deterrence through and beyond the end of the century. That said, at least two questions—one broad and one quite specific—need to be raised with regard to future modernization efforts. The first concerns the administration's ability, given the deficit problem and the Gramm-Rudman-Hollings approach to it, to keep the strategic program on schedule. This involves both maintaining existing programmatic timetables in the face of budgetary reductions and protecting elements of the overall program from congressionally imposed termination or severe stretch-outs. On both counts, I believe personally that there is cause for cautious optimism. Within its own ranks, the administration has consistently been able to protect strategic modernization as its highest defense priority; while not conclusive, this determination augurs well for the future. In the past, too, a majority in both houses of Congress also has recognized that effective nuclear deterrence supports our ability to deter aggression across the board. The important contributions of the Trident SSBN, the Trident II missile, and the ATB to deterrence and stability have, by and large, been received quite favorably on the Hill. Since the overall strategic program represents only 13–15 percent of the total DoD budget, it—and the key programs within it that reach maturity over the next five to ten years—meets the criteria of affordable and necessary improvements.

The second major question concerns the fate of the proposed small ICBM, and in this area I believe we face an urgent need to move the present debate into a more meaningful vein. Current arguments revolve around the issue of whether a small mobile missile can—by expanding the geographic area within which it is deployed—present an "unacceptable price to attack" to Soviet targeteers. But that discussion is somewhat off the mark, because an unacceptable price to attack is a necessary *but not sufficient* condition for deployment of a small ICBM force. The original raison d'être of the single warhead small ICBM was to deter attack on U.S. silo-based ICBMs by making it impossible for the Soviet military to destroy all our land-based missiles. Implicit in this premise is the thought that the number of small ICBM RVs deployed would be sufficient—particularly compared with the number of U.S. silo-based RVs—to make an attack on the latter militarily unsound. It follows from this that focusing solely on whether the small missile's deployment area is too large to be attacked misses the

relevant consideration, which is: *Assuming* that the small ICBM can be deployed so as to present an unacceptable price to attack, how many such small ICBM RVs constitute an adequate deterrent to an attack on the MX/Minuteman force? Although the answer most certainly represents a range between X and Y hundred RVs, clearly there is a lower bound.

It would be foolish and dangerous to deploy only a small number of SICBMs, however untargetable, in the belief that this would deter Soviet attack against silo-based forces because, as armies in the past avoided assault on fortified cities in favor of bypassing or isolating them, so too could the Soviet leadership decide that the small number of deployed ICBMs could not meaningfully affect the balance of forces existing after a Soviet first-strike. The next consideration, after determining the approximate size of a small ICBM force adequate to U.S. deterrent needs, is the cost of such a force. And following from that must come the judgment of whether, for that sum, the small ICBM is a solution the country is willing to afford and represents the most cost-effective method of meeting our requirements. It is to these questions that the debate *must* shift if the small ICBM issue is to be resolved in a strategically sound manner.

Two additional factors should be kept in mind as we project the strategic nuclear environment of the 1990s. The first is the increasing interrelationship between offensive and defensive forces. The second is the emergence of growing numbers of "relocatable" targets—which include, but are by no means limited to, mobile missiles—and the challenge this poses to traditional targeting techniques. We are only beginning to understand both of these areas, and a substantial amount of additional work remains to be done in each. That said, and without minimizing the challenges posed by each, I remain firmly convinced that we will continue to maintain an effective strategic deterrent that will continue to underpin U.S. extended deterrence.

III. EXTENDED DETERRENCE AND U.S. STRATEGIC FORCE DOCTRINE AND MODERNIZATION: A EUROPEAN PERSPECTIVE

by John Roper and Phil Williams

INTRODUCTION

The credibility of extended deterrence has been questioned by Western analysts since the Soviet launch of Sputnik 30 years ago—a development that highlighted the potential costs to the United States of fulfilling its commitment to its European allies through the use of nuclear weapons. Yet during the same period, extended deterrence has not been challenged externally: Soviet activism in the Third World has not been matched by adventurism in Europe. There is something rather paradoxical about this juxtaposition of internal concern and even talk of crisis on the one side and the apparent stability and effectiveness of deterrence in Europe on the other. From this paradox it is possible to identify two contrasting models of extended deterrence, one of which emphasizes the fragility of the American nuclear guarantee to Western Europe and the other of which suggests that this guarantee retains its validity and will continue to do so as long as certain basic requirements are met. The first part of this paper elucidates these two models. The second part identifies key elements of the debate that has taken place in the major European members of NATO about extended deterrence and its requirements. The third part of the paper examines the connections between extended deterrence and U.S. force structure and strategic doctrine and highlights possible changes in force structure that might arouse further anxieties in Europe over the future of extended deterrence.

CONTRASTING MODELS OF EXTENDED DETERRENCE

There are several problems with discussions of extended deterrence, many of which reflect the fact that most assertions about deterrence are intuitive rather than empirical. Nevertheless, in much of the debate over recent years, it is possible to discern two very different approaches, one of which might loosely be termed the strategic model and the other the political model.

The strategic model of extended deterrence treats the problem almost exclusively in terms of the balance of military power between Moscow and Washington. The assumption is that the Soviet Union is a predatory state, which can be deterred from aggression in Europe only by the deployment of countervailing power at all levels. In this view the United States and its allies need a comprehensive range of options to deter the Soviet Union from military actions at any level. Should the Soviet Union achieve preponderance at both the nuclear and the conventional level, it would attempt to exploit this through intimidation if not overt aggression against Western Europe. The other side of this argument is that the United States will be prepared to maintain the commitment only if Washington is confident of its ability to implement it in a way that minimizes the risk of destruction of the American homeland. This problem was recognized as early as 1950 with NSC-68, which saw the solution to the eventual nuclear stalemate—regarded as the inevitable consequence of Soviet technological advancement—as a buildup of American and allied conventional forces. This idea came to the fore once again in the early 1960s with McNamara's insistence that NATO should provide a capability for sustained conventional resistance against a major Warsaw Pact offensive. More recently, former Secretary McNamara has gone from demanding what was in effect a tacit no first use policy to prescribing an explicit no first use stance, arguing that nuclear weapons are effective only in deterring the use of nuclear weapons.

The irony in this is that McNamara was also a key figure in developing a second response to the loss of American nuclear superiority—the search for usable nuclear options. The counterforce strategy he enunciated at Athens in early 1962, and made public in his Ann Arbor speech a few months later, was explicit on this point, and claimed that nuclear war should be approached in the same way as conventional war had been in the past: The main targets should be the adversary's military capabilities rather than his civilian population. Inevitably, there were several problems with such an approach. The first was that McNamara himself moved from counterforce and damage limitation to assured destruction, thereby seeming to repudiate his earlier claims. The second is that although the SIOP retained more flexibility than suggested by the principle of assured destruction (which was essentially a planning device for sizing American forces), it was not as flexible as McNamara's 1962 comments implied. Nevertheless, the Athens statement and the Ann Arbor speech provided a framework for dealing with the problem of extended deterrence in a world where an American use of nuclear weapons on behalf of Western Europe is potentially suicidal. The Schlesinger Doctrine, the countervailing

approach enshrined in PD-59, and the idea of prevailing enunciated in the first two years of the Reagan administration can all be understood as variations and refinements on the basic theme established by McNamara in 1962 and highlighted the continuing effort to build greater flexibility into the SIOP.

There are, of course, important differences between the conventional and nuclear "solutions" to the credibility problem inherent in extended deterrence in a world characterized by strategic parity. Yet they have much more in common than is immediately evident. Both rest upon an assumption that deterrence is predominantly a military problem demanding traditional military solutions. Furthermore, both emphasize reconciling the competing requirements of deterrence and warfighting through the provision of usable options. If the parallels should not be overlooked, however, the differences should not be minimized. These concern both the range of options that needs to be provided and the extent to which nuclear weapons can compensate for conventional weakness. The "no first use" advocates see little or no possibility of compensation and demand that the Alliance develop a capacity for sustained conventional resistance against a conventional attack by Warsaw Pact forces. The proponents of limited nuclear options are, in many cases, less anxious about the conventional balance. There are differences too over the importance of the nuclear threshold. McNamara and the advocates of no first use see this as the crucial firebreak and worry about strategies based on a willingness to transgress this limitation deliberately. In their view, "the one clearly definable firebreak against the worldwide disaster of general nuclear war is the one that stands between all other kinds of conflict and any use whatsoever of nuclear weapons."[1]

After this is crossed they hold out little prospect for limitation and restraint. Those who emphasize the need for limited nuclear options in contrast base their argument on the possibility that intrawar deterrence could prove so effective that high levels of violence involving the selective use of nuclear weapons would not necessarily degenerate into general nuclear war. Yet even here the differences should not be exaggerated. Both the advocates of no first use and the proponents of limited nuclear options accept that superpower conflict can be limited. They disagree over where the limits can or should be established, particularly the feasibility of imposing mutually acceptable and recognizable limits after the nuclear threshold has been crossed; but they share the belief that a superpower conflict in Europe would involve discrete

[1]See M. Bundy, G. F. Kennan, R. S. McNamara, and G. Smith, "Nuclear Weapons and the Atlantic Alliance" in F. Holroyd (ed.), *Thinking About Nuclear Weapons*, Croom Helm in association with the Open University, London, 1985.

levels of violence and treat escalation as something that depends crucially on deliberate decisions and actions.

To highlight similarities of approach and logic in this way is not to downplay the divergent prescriptions offered by what are essentially two separate and to some extent competing strands within the strategic approach to the problem of security in Europe. Nor is it to ignore the fact that they have reached very different conclusions about the requirements of extended deterrence. The key to the position of the no first use proponents is denial—they deny that the American nuclear umbrella has any validity, at least in relation to Soviet conventional attack, and see the answer in terms of NATO developing a capability to deny the Soviet Union victory at this level of warfare. The limited options school sees the important dimension of the American posture as nuclear rather than conventional and believes that an appropriate U.S. nuclear strategy and force posture is the key to the credibility of extended deterrence in Europe. The fact that both see the issue in terms of military posture, however, differentiates them clearly from the second broad approach, which treats extended deterrence in predominantly political terms.

The political model of extended deterrence is not particularly concerned with either the details of NATO's posture or American nuclear strategy. Instead, it rests upon important assumptions about the effect of nuclear weapons on state behavior, and about the dangers inherent in confrontations between the superpowers. In this model, deterrence in Europe is not a particularly difficult task. Nuclear weapons have imposed a basic prudence on both superpowers and made them reluctant to run risks. This has strengthened the status quo at least in those areas where one or the other of the superpowers has vital interests. The important point for deterrence is to communicate to the Soviet Union that any aggressive move against Western Europe would be a challenge to American vital interests. In fact this communication process has worked extremely effectively since 1949. The North Atlantic Treaty was important not only in aggregating Western strength but also in clarifying the situation in Europe, and highlighting the limits of Soviet influence on the Continent. The subsequent deployment of American troops to Europe reinforced the message that any Soviet incursion into Western Europe would involve the Soviet Union in a war with the United States. The troop presence provided a visible and concrete manifestation of the American commitment to its allies, and those who accept the political model of deterrence would claim that so long as substantial numbers of these troops remain—and the precise number is not crucial—then the Soviet Union is unlikely to engage in overt aggression in Europe. Should it do so it would embark upon an action fraught with enormous risks.

Implicit in this assessment is the notion that superpower confrontations—whether or not they have spilled over into the actual use of violence—can best be understood as competitions in risk-taking. Furthermore, in these competitions the main determinant of resolve or relative risk-taking propensity is who has most at stake. The military balance, whether at the strategic or the conventional level, cannot be discounted completely, but in the absence of major asymmetries it is unlikely to have a decisive effect on outcomes. In this view, then, the real issue is not whether the United States would sacrifice New York for London, Paris, or Bonn, but whether the United States would be prepared to take more risks in order to maintain the independence of its allies than the Soviet Union would be prepared to take in order to subjugate Western Europe.[2] Given the fact that if the United States loses Western Europe it effectively loses the Cold War, the stakes for Washington are immense; and it is difficult to find reasons why Soviet leaders would be prepared to even contemplate entering a contest in which the asymmetries of interest, and therefore of resolve, are so clearly stacked against them.

Another relevant point here, one that further differentiates the political model of extended deterrence from the strategic model, is that the question of whether the United States would commit suicide on behalf of Western Europe is far too starkly posed. The real issue is whether the United States might be prepared to start events moving in such a way that mutual destruction could be the eventual outcome. In other words, the American nuclear umbrella rests not on cool and rational American threats to initiate a strategic nuclear exchange on behalf of Western Europe but on a willingness to make what Thomas Schelling described as "threats that leave something to chance."[3]

The American military presence in Western Europe means that any Soviet aggression would at the very least be a major step into the unknown and would start an inherently volatile and potentially uncontrollable process. As McGeorge Bundy argued before his advocacy of no first use, the credibility of the American nuclear guarantee to Western Europe depends on two closely related considerations, "the visible deployment of major American military forces in Europe and the very evident risk that any large scale engagement between Soviet and American forces would rapidly and uncontrollably become general,

[2]This is developed more fully in P. Williams, *U.S. Troops in Europe*, Chatham House Paper 25, Routledge and Kegan Paul, London, 1984, pp. 67–68.

[3]See T. C. Schelling, *Arms and Influence*, Yale University Press, New Haven, 1967.

nuclear and disastrous."[4] The dominant theme can be traced back to the Clausewitzian notion that violence between great powers has an inherent capacity to lead to extremes. By having forces in place in support of the status quo, however, the United States has successfully put the onus for initiating this escalation process on the Soviet Union. Furthermore, in this approach the key threshold is not that between conventional and nuclear war, but the one between peace and war, or what Bernard Brodie used to describe as the "clarity of the line between nonwar and destruction."[5]

Although there can be no certainty that the escalation process would be either automatic or uncontrollable, the escalatory dynamics inherent in the use of large scale violence cannot be ignored. Imposing limits on a major superpower conflict would require a degree of skill, wisdom, and political control that might be difficult to achieve. The Cuban Missile Crisis highlighted the difficulties of crisis management in peacetime. Once the line between coercion and violence has been crossed the prospects for de-escalation almost certainly diminish, and the tasks of crisis management become even more formidable. Policymakers would be subjected to unprecedented levels of stress, would face acute dilemmas between the logic of military necessity and the demands of political signalling, and would have to contend with enormous problems in controlling the large military organizations at their disposal. In addition, the demands on C^3 capabilities would be immense, while the C^3 facilities themselves would be subject to considerable degradation during the course of hostilities. The prospect for mistakes and miscalculations would also be considerable, especially as the two sides would almost certainly be operating on very different strategic assumptions. Under certain circumstances, pre-emptive escalation could appear a very attractive option to one or even both sides. While decisionmakers on both sides might strive to maintain control over events, therefore, the gap between political aspirations and the realities of large-scale war in Europe would be very considerable. Once the line between peace and war is crossed in Europe, the risks of disaster loom large.

There is no evidence from anything that Moscow has done that the Soviet leadership is willing to contemplate risks of this magnitude. To embark on aggression in Europe the Soviet leaders would have to be either desperate or endowed with a degree of recklessness that has

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[4]M. Bundy, "The Future of Strategic Deterrence," *Survival*, Vol. 21, No. 6, November/December, 1979, pp. 268–272.

[5]B. Brodie, *Escalation and the Nuclear Option*, Princeton University Press, 1966, p. 82.

hitherto been absent. Furthermore, if the Soviet Union exhibits either of these qualities, then it could not safely be assumed that it would refrain from the use of nuclear weapons. Although Soviet strategic doctrine and military posture both suggest that the Soviet Union would be able to fight a war in Europe without the use of nuclear weapons, this is very different from the political reality of a decision to invade. Under most conceivable circumstances such a decision would almost certainly contain elements of irrationality. To assume that the Soviet Union would then be very rational in its conduct of the war is to be overly selective in the assumptions one makes. The desperation or recklessness that prompted the initial aggression could well make itself felt in the course of the subsequent hostilities and would make it far less likely that Moscow would impose massive restraint on the use of nuclear weapons.

The contrast between the benefits of the existing situation in Europe and the dangers inherent in any attempt to change the status quo by force is in one sense a function of the legitimacy of the established order. Indeed, this highlights a dimension of the American commitment that is rarely discussed in strategic assessments but that needs to be included in any analysis of the effectiveness of the American guarantee. The superpowers have established tacit codes of conduct that have helped them both to prevent and to manage crises. The division of Europe and the establishment of rival "spheres of influence" has been ratified by time and by diplomatic practice. Its legitimacy was further underlined by the Helsinki Agreement of 1975. The implication is that what in strategic terms is seen exclusively as a commitment has taken on at least some of the features of an international "norm." This is not to deny that each superpower would like to weaken or undermine the solidarity of the adversary's alliance or the cohesion of his bloc. In practice, though, the attractions of stability tend to set clear limits to such aspirations. As soon as the risks and dangers of the alternatives are considered, the status quo becomes far less unattractive than is often assumed. The corollary is that once this norm has been breached, the superpowers would enter new and uncharted territory in which the "rules" of the game would be difficult either to identify or enforce.

The implication of the political model of extended deterrence is that so long as there is a clear American interest in Western European security and some visible military presence to symbolize that commitment, then the American nuclear guarantee has a high degree of credibility that is not dependent on the strategic nuclear balance. How though does this guarantee look to the European allies? Do they subscribe to a view of extended deterrence that approximates the strategic

model or do they accept the assumptions underlying the political model?

THE EUROPEANS AND EXTENDED DETERRENCE

Inevitably, there are differences amongst the major West European governments stemming from national preoccupations and priorities. There are also important differences between governments and opposition parties and between elite opinion and mass public opinion. In both the Federal Republic of Germany and the United Kingdom, the defense consensus has been severely eroded over the last few years, and the possibility of governments coming to power that have very different concerns and preferences from the present incumbents cannot be ruled out.

In France, of course, the consensus seems much broader. Nevertheless, the French approach to extended deterrence is not quite as straightforward as it appears. French governments and analysts have long expressed doubts over the viability of extended deterrence. They seem to share many of the assumptions underlying the strategic model of extended deterrence outlined above and, somewhat ironically, have traditionally taken what has become the position of the no first use proponents that in a world where the possibility of mutual assured destruction is a basic fact of strategic life, tinkering with the American strategic doctrine and force posture will not succeed in restoring credibility. More recently, however, there has been some tempering of this stance; President Mitterrand gave strong backing to the modernization of NATO's long-range theater nuclear forces. Although his support for the implementation of the 1979 decision was partly motivated by concerns over West German tendencies toward neutralism, it was also an acknowledgment that the modernization program would strengthen the coupling between any war in Europe and the homelands of the two superpowers. In other words, although France accepts much of the diagnosis of the extended deterrence problem offered by the proponents of no first use, the official French position is more qualified and subtle than is often assumed.

It is on the prescription for dealing with the problem, however, that France differs most markedly from the advocates of no first use. Although Paris recognizes the need for enhancing NATO's conventional capabilities, this is seen as far less important than the maintenance and improvement of indigenous European nuclear forces. Unofficial opinion in France has been most explicit on this. Pierre Lellouche, for example, has argued that as their strategic forces are

modernized, Britain and France will acquire "a deterrent power capable of protecting much more than their respective territories." This capability, largely through its potential to trigger nuclear escalation, will not only compensate for the decline of the American nuclear guarantee but will also increase coupling between conflict in Europe and American strategic central systems.[6] The advantage of this is that European deterrent forces will provide a supplement to the residual U.S. guarantee in the short and medium terms and, perhaps more important, a substitute for this guarantee in the long term.

In other words, the French position on extended deterrence can be described as a moderate version of the strategic model with French strategic nuclear forces supplying the link to the political model. The British stance can best be understood in terms of the political model tinged with a touch of skepticism that has made Britain look to its strategic nuclear deterrent as an additional element of insurance. The rationale for British acquisition and maintenance of a strategic nuclear capability has never been cast in Gaullist terms. Yet underlying it there is what might be described as a mealy-mouthed Gaullism. Whereas French spokesmen have explicitly challenged the viability of extended deterrence, the British approach has been far less direct and unequivocal. On the one side it has been claimed that Britain itself has no doubts about the authenticity of the American nuclear guarantee; on the other it has been argued that under certain circumstances the Soviet Union might begin to have such doubts, in which case the existence of an additional center of decision would add to the risks and uncertainty and thereby help to maintain deterrence. As the Open Government Document on the future UK strategic deterrent force noted:

> The decision to use United States nuclear weapons in defense of Europe, with all the risk to the United States homeland this would entail, would be enormously grave. A Soviet leadership—perhaps much changed in character from today's, perhaps also operating amid the pressures of turbulent internal or external circumstances—might believe that it could impose its will on Europe by military force without becoming involved in strategic nuclear war with the United States. Modernized U.S. nuclear forces in Europe help guard against any such misconception; but an independent capability fully under European control provides a key element of insurance.[7]

In contrast to France, however, the future of Britain's strategic deterrent is in some doubt. Although the Thatcher government

[6]P. Lellouche, "Europe and Her Defense," in Holroyd, 1985, p. 316.

[7]U.K. Ministry of Defence, "The Future U.K. Strategic Nuclear Deterrent Force," in Holroyd, 1985, p. 305.

remains firmly committed to the acquisition of Trident, this commitment is not shared by the other political parties in Britain. The Labour Party has pledged that if it is elected it would cancel Trident and remove American cruise missiles from the United Kingdom. The party gives strong support to the idea of no first use of nuclear weapons and sees this as a way of minimizing the likelihood of limited nuclear war in Europe. Cruise missiles are regarded as both decoupling in their effects and asymptomatic of a deeply disturbing American belligerency. At the same time the Left in Britain is not too vociferous in presenting its doubts about extended deterrence, because of its awareness that these doubts strengthen the rationale for Trident.

French skepticism and British ambivalence have been accompanied by continued faith in extended deterrence in the Federal Republic of Germany. Although there is now a recognition of the need to move to delayed first use in a way that was not evident in the 1960s, the credibility of the American nuclear guarantee has not been called into question in any fundamental sense. This is not to claim that West Germany is sanguine about the American commitment. Although the dominant view of extended deterrence seems to be similar in most respects to the political model outlined above, the status of the Federal Republic as the most exposed and vulnerable of the allies makes it extremely sensitive to any changes in the American posture that seem to presage a weakening of the U.S. commitment. This is not really surprising. The alternatives for the Federal Republic are unattractive to say the least. Even acceptance of delayed first use can be understood not so much as a desired option but as a recognition of the need to minimize the nuclear risk to the United States, and indeed to West Germany itself, inherent in the U.S. nuclear guarantee. It can also be understood, of course, as part of the attempt to reassure the West German public about NATO strategy.

In other words, the three major European powers differ in their assessments of the viability of extended deterrence. Yet there is perhaps a greater degree of convergence of attitudes among them than is immediately apparent. There is agreement on the importance of the presence of U.S. ground forces as linkage to the American central systems. European states are aware too of the need to convince American opinion at both the congressional and popular level that the allies take their defense seriously. European defense efforts have perhaps been determined less by assessments of what level of conventional effort is enough to keep the Russians out than by assumptions about what level of effort is needed to keep the Americans in. It seems unlikely that this will change. The Conventional Defense Initiative in NATO can be understood as the latest in a series of attempts to reconcile American

demands to strengthen conventional forces on the one side with European resource constraints and reluctance to downgrade the nuclear options on the other. It also has the advantage that it can be presented to both American and European publics as an attempt to "raise the nuclear threshold" and thereby alleviate some of the concerns expressed during the nuclear debates of the last several years.

If there is consensus on the desirability of maintaining substantial American ground forces in Europe, there is also agreement, at least so far as the present governments are concerned, that the INF deployment has been successful not only in displaying NATO's ability to carry through hard decisions in view of both Soviet opposition and public protest, but also in reaffirming the potential coupling between the European and intercontinental levels of warfare. That outcome has been underlined by statements from Moscow that missiles fired against Soviet territory from Europe would evoke a retaliatory strike against the United States itself.

The INF deployment, like the troop presence, has become symbolic of the coupling necessary for extended deterrence. Furthermore, this symbolism has come full circle. Prompted initially by European concerns about coupling in a period of strategic parity, the deployment then became a test of the capacity of the Alliance to avoid another fiasco like that over enhanced radiation warheads, and of European fidelity to the Alliance, which required a willingness to overcome powerful domestic obstacles to follow through the modernization decision. Now that this challenge has been overcome and the deployment is well in train, there has been, perhaps inevitably, a reversion to the initial conception of the missiles as evidence that coupling remains powerful. Indeed, the symbolic importance of these missiles in terms of coupling is something that has powerful appeal for the adherents of both the political and the strategic models of extended deterrence, with the important exception of the proponents of no first use, albeit for very different reasons.

The supporters of limited nuclear options see the forces as important in the provision of additional alternatives, and at least some of those who adhere to the political concept of extended deterrence see them as augmenting deterrence because they increase the likelihood of inadvertent escalation. For the first group, the vulnerability of the systems is a cause of concern; for the second this very vulnerability and the resulting incentives for early use may actually strengthen deterrence. In the political model, "use them or lose them" dilemmas are not entirely unwelcome, although they do have costs in terms of reduced capacity for crisis management. In spite of this difference, however, both groups see the deployment as essential.

West Europeans are rather more relaxed about American strategic forces. The fact that since FY1980 the Reagan administration has achieved almost a 75 percent increase in survivable capabilities for "hard target kill" is not something that many Europeans believe to be critical. Conversely, although a deterioration in the American position sufficiently marked to suggest that rough parity had been replaced by considerable undoubted inferiority would arouse anxiety, Europeans tend to be less concerned over asymmetries between Soviet and American strategic forces than are the supporters of limited nuclear options in the U.S. strategic analysis community. Insofar as the periodic crises of confidence in extended deterrence that beset the alliance have their roots in concern over deficiencies in the American strategic posture, therefore, the source of these crises tends to be in the United States itself rather than in Europe.

There is a recognition in Europe that strategic (and conventional) options giving the United States some prospect of fulfilling its commitment to European security without committing suicide are essential, if only to make the continuation of the commitment tolerable to security policymakers and planners as well as to congressional and public opinion. In other words, the political model of deterrence cannot stand alone. It is adequate to deter the Soviet Union and to reassure the Europeans, but it is not sufficient for Americans concerned about the manner in which the guarantee to Europe would have to be implemented in the event of a Soviet challenge. This is recognized in Europe. Indeed, in spite of national differences in Europe there is a consensus that certain minimum requirements have to be met for extended deterrence to work. At the moment there is also an agreement that with the supplement provided by British and French strategic nuclear forces, extended deterrence is in a far better state than could have been envisioned at the time of Sputnik. What though of possible future changes in American strategy and force posture? The final section of the paper considers this question and identifies several developments that pose challenges to the continuation of extended deterrence.

AMERICAN FORCE POSTURE AND EXTENDED DETERRENCE

The Reagan administration claims that both the improvements in force posture and the refinements of strategic doctrine since 1980 have provided a greater degree of security for the United States and its allies. Yet several current and future developments may have

important and possibly adverse implications for extended deterrence. The first of these is increasing budgetary constraints. Even if Gramm-Rudman does not remain in operation, the impulses that gave rise to it will remain powerful. If the defense budget increases over the next few years in line with the rate of inflation, then that will be a considerable achievement against a background in which concern over the deficit has combined with resentment against what is widely seen as a wasteful and corrupt process of defense planning and procurement. Consequently, resource allocation battles within defense are likely to become far more intense than they have been for many years as the United States attempts to meet the goal of an effective 600-ship navy, continues its program of strategic force modernization, and invests further in SDI research and development. In these circumstances, it is not inconceivable that conventional ground forces could be one of the casualties. Although there are few signs of this occurring it certainly cannot be excluded. Indeed, differences over out-of-area issues and the general sense of resentment in Washington over the lack of European support for American policies may feed into the resource allocation process in ways that mean the military presence in Europe is simply given a lower priority. The danger with reductions in American forces in Europe is that unless the Europeans are able to compensate, which seems unlikely, such cuts will generate their own momentum.

In the political model of extended deterrence, American troops are important as hostages to ensure that Soviet aggression leads inexorably to a superpower confrontation. In this view, so long as there are enough troops to ensure that they could not simply be withdrawn in a crisis, the precise number is not particularly important. The danger is that uncompensated cuts would be interpreted in the United States as a reversion to the trip wire and would thereby be seen as accentuating the risks to the United States of the security guarantee to Western Europe. In these circumstances, alliance with Western Europe might increasingly be seen as a liability rather than an asset, with the result that American disengagement from Europe could be seen as the least unattractive of several dismal alternatives.

The implication of this is that extended deterrence is tolerable to the United States so long as there are enough ambiguities to enable the Alliance to obscure the major dilemmas inherent within it, especially the conflict between the American desire to contain any hostilities within the European theater and the European preference that any war should be fought over their heads. This is why attempts at clarifying flexible response and shifting the balance between its conventional and nuclear components, in either direction, only succeed in provoking anxieties in either the United States or the Federal Republic of Germany.

It is also why NATO strategy in practice has to conflate elements of both the political and strategic models. Disentangling them might be analytically useful but politically extremely damaging. In other words, formal European acceptance of the strategic model is the price for a continuation of an American presence that is a prerequisite for the maintenance of the political model of extended deterrence.

A second development that could have important implications for the future American force posture is arms control. There has always been tension between the desire for superpower arms control agreements, which to the extent that they are based upon minimum deterrence strategic roles and missions are much easier to achieve, and the imperatives of extended deterrence, which demand limited nuclear options. This is not to suggest, of course, that such options are in the SIOP solely for the benefit of the European allies. They also reflect the desire of U.S. military planners to have alternatives that will enable the President to avoid being placed in a position where there are no choices between all-out attack on Soviet cities and surrender. At the very least, the demands of extended deterrence provide a powerful argument for the advocates of limited nuclear options, even when this advocacy has other motives. Yet Europeans could live more easily with an agreement on strategic offensive forces of intercontinental range than with an agreement that severely limited the numbers of cruise and Pershing missiles deployed in Europe. In this connection the zero option is the worst of all worlds. Its shortcomings go back to the rationale for the modernization decision itself. Insofar as this reflected concerns over coupling, political reassurance, and the need to replace obsolescent and vulnerable aircraft, then cruise and Pershing missiles were essential. They had both a political and military rationale, and nothing that has occurred since 1979 has undermined this.

By casting the justification in terms of responding to the SS-20, the Alliance gave the impression that the deployment was negotiable. The dual track decision was fully consistent with NATO's needs only so long as the arms control track was about legitimizing a level of deployment sufficient to meet NATO's needs. The zero option, which President Reagan first presented in 1981, revealed the tension between the desire for an arms control agreement on the one side and the continued need for coupling (which is underlined by the symbolism once again attached to cruise and Pershing in Europe) on the other. The more recent discussions of the zero option in early 1986 simply underlined this tension. To meet the requirements of extended deterrence, any INF agreement has to permit the retention in Europe of a considerable number of American missiles. At the same time there is nothing sacrosanct about the deployment figure of 572, which was in fact chosen to allow a margin for negotiated reductions.

If the Europeans can accept a smaller number of cruise and Pershing missiles than initially contemplated, there would be far greater reservations about attempts to negotiate limits on British and French strategic forces. These are judged by both countries as an indispensable supplement to extended deterrence, and one that in the view of some French analysts at least will increasingly be transformed from supplement to substitute. In these circumstances, giving the Soviet Union influence over the strategic modernization programs of Britain or France would be to place in question forces that seem likely to make an even more important contribution to European security in the future than they have made in the past. This also explains why Europeans become rather nervous about proposals, whether they emanate from Moscow or Washington, to rid the world of nuclear weapons. In such a world conventional imbalances become far more important than they are at present.

The other major threat to extended deterrence is more remote but nevertheless needs to be considered—a fundamental shift from an offense-dominant to a defense-dominant world. Deep cuts in strategic offensive capabilities, together with deployment of major strategic defenses, would have several not entirely consistent implications for extended deterrence. In the first place, such a development would mean that the United States was no longer in a position where its commitment to Europe brought with it acute vulnerabilities. The United States is far more likely to use force on behalf of its allies when this use does not carry with it a substantial risk of nuclear attacks against the American homeland. At the same time, by undermining American capability to inflict harm upon the Soviet Union, the change to a defense-dominant world could provide Moscow with a degree of freedom in relation to Europe that has hitherto been absent. Furthermore, such a change would pose enormous problems for the strategic forces of France and Britain. Perhaps most important of all, it could change the basis of superpower relations.

The kind of prudent behavior coupled with mutual acceptance of tacit codes of conduct that has hitherto been essential both to the avoidance of superpower conflict and to the success of extended deterrence might give way to less restrained policies and actions. Indeed, the worst of all political outcomes for the Alliance might be one in which such a transition was coupled with a reduction in the American military presence in Europe. The deployment of strategic defenses by both superpowers, if accompanied by deep cuts in offensive forces, would effectively represent de facto adoption of a no first use policy by the United States. In these circumstances, extended deterrence would be a thing of the past and Europe would once again be in danger of

becoming safe for conventional war. If this was accompanied by cuts in American troops in Europe, then NATO's capability to resist conventionally would also be substantially weakened at the very time it is most needed. However, a major initiative to increase NATO's conventional strength would simply intensify concerns that the United States was prepared to fight a large scale conventional war in Europe. Fortunately, this is a somewhat remote prospect, as there are few signs that such a transition to a defense-dominant world will actually take place.

Of more immediate concern, at least to some Europeans, are the changes taking place in American maritime strategy. The idea of attacking Soviet SSBNs, or their bastions in the North, during a conventional war in Europe worries Europeans anxious that such measures would transform a conventional war into a nuclear conflict. This strategy would blur the threshold between conventional and nuclear warfighting and make it more difficult for the superpowers to envision hostilities being confined to Europe. Insofar as extended deterrence is based on the political model that emphasizes the centrality of risks of inadvertent and uncontrollable escalation, then the strategy outlined by Admiral Watkins would strengthen it. Yet the strategy also raises concerns about crisis stability. Indeed, one of the problems with threats whose effectiveness is based on increasing the likelihood of inadvertent escalation is that although they strengthen deterrence in peacetime, they add to the problems of crisis management and escalation control once hostilities have broken out. This may be something that the allies simply have to live with. Many of the problems of the nuclear age have no solutions. There are only difficult dilemmas to be managed and painful tradeoffs to be made.

In view of this, as well as the different priorities between members of the alliance, the current state of extended deterrence is about as good as can be expected. The difficulties will come in attempting to maintain it. There is some flexibility, and, if the argument here is correct, extended deterrence is more robust than is generally assumed. Certain developments, however, could jeopardize extended deterrence in the future. It is important, therefore, as the United States enters a period in which its force posture could change more radically than it has for some time, that there is an awareness of the likely effects of possible changes on the American guarantee to Western Europe. How much the U.S. posture, strategy, and doctrine will change remains uncertain, of course. In spite of the Reagan administration's claims to have reversed the decade of neglect and brought about marked improvements in American force posture and a novel approach to nuclear strategy, the most striking feature about U.S. defense policy is

the degree of continuity it exhibits. Nevertheless, important changes could take place in the foreseeable future. In these circumstances, a collective European appraisal of extended deterrence could help to influence, if only at the margins, the direction such change might take. Once again, though, this raises the question of the most appropriate institutional forum for hammering out a distinctive West European assessment of security problems. The absence of France from the Nuclear Planning Group within NATO precludes this forum.

In some ways, therefore, the Western European Union might be the appropriate place for an attempt to devise a common and more coherent European position on extended deterrence than has hitherto been evident. Although this might be divisive in terms of Atlantic relations, it is not something that can be postponed indefinitely. It has to be accepted that extended deterrence is "a classic case . . . of doctrinal confusion and pragmatic success."[8] Ambiguity and uncertainty are inevitable, and, as suggested above, too much clarity could be politically damaging. Nevertheless, the Europeans should at least attempt to distinguish between ambiguities and uncertainties that are benign in their effect and those that are likely to have a corrosive effect on the Alliance. Only if they do this will they be in a position to influence the future of American strategic doctrine and posture and ensure that extended deterrence remains a major priority for American defense policymakers and planners.

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[8]Bundy, 1979.

IV. EVOLUTION OF NATO NUCLEAR DOCTRINE AND FORCE POSTURE

by Robert Alston

In this paper, I want to provide a practitioner's view of NATO nuclear doctrine and force posture, rather than a historian's or commentator's view. I'm not going to retrace the ground in relation to U.S. strategic systems and the doctrine associated with them. I've taken note of the word *alliance* in the title and I'm going to look at the substrategic components of the alliance's nuclear force and their role, which is at the heart of any serious consideration of extended deterrence. I've also taken note of the word *evolution* and I'm not only going to look backward but also forward on an evolutionary spectrum. Therefore, I will try to relate what seems to have happened over the last ten years in the alliance and some problems that lie ahead.

NATO's doctrine and forces posture is designed to deter in several ways. First, there is a political dimension. As noted in Uwe Nerlich's paper, what we want to achieve in the alliance is something that effectively restrains a key Soviet priority in peacetime: changing the European security situation. Second, it is also very important to remember that NATO seeks to deter not just nuclear attack, but any kind of attack. Therefore, the critical criterion for analysis is, Are we actually achieving the situation where the overall price, not simply the price of escalation over the nuclear threshold, to the Soviets will be regarded by them as enforcing prudence? Third, of course, we are dealing with a system and a force posture that is designed to provide options. Thus, it cannot be an entirely symbolic system but neither can it be an absolute system, where we know exactly what we might do, or want to do, with our forces.

There are many who know the history of the evolution of NATO's doctrine and force structure. I'm not going to attempt to summarize the debates of the 1960s, the reasons NATO came up with MC 14-3 in 1968, and the compromises and issues that are concealed within it. Almost all of those political strands that went into debate remain valid today, as does the basic outcome. One needs to assess flexible response from two critical levels and purposes, categories reflected in John Roper's and Phil Williams's paper. The first question about flexible response, doctrine and posture, is whether it fulfills what might be called the symbolic purposes. I use the word *symbolic* as shorthand for a number of basically political objectives: Does it fulfill the coupling

requirement of maintaining a clear link between conventional forces on the one hand and U.S. strategic systems on another? Does it reflect an acceptable degree of burden sharing, not just with the United States but other allies, either as possessors or operators or as basing countries? Does it adequately reflect the political resolve of the alliance? It seems to me that Western resolve is clearly a critical signal to the East, perhaps more important than the military considerations themselves, in assessing the success of the 1979 decision. And finally, does it reflect an adequate degree of political control over a military situation? NATO strategy should permit both the NATO and national decisionmaking systems the maximum flexibility in extraordinarily complex circumstances.

At another level, we have to ask ourselves if flexible response is adequate in military terms, as a deterrent force; the main criterion must be not our perceptions but Soviet perceptions. When we look at the military adequacy of NATO forces and policies, we are led again to the other debate concerning the ambiguity and uncertainty built into both the doctrine and plans for its potential use, which lead to questions about its exact military effect. But that very uncertainty is itself a forceful deterrent and in some ways what deterrence is all about. Even if we were extremely strong militarily, even if we were in a position to be much less politically concerned than we are, it seems that a more clearcut military doctrine would be easier for the Soviets to deal with and thus circumvent.

Now, after laying out these two levels I want to explain why I would reject the thesis that NATO's doctrine and the posture are in any way obsolete, despite those who believe they can point to examples that would work in that direction. Far from being a static system and looking at recent alliance accomplishments, quite a formidable list of problems have actually been addressed—many of them not definitively decided upon or resolved, but certainly very much a part of the everyday agenda of such bodies as the Nuclear Planning Group (NPG) and other groups at NATO Headquarters. At the top of the list obviously comes the 1979 dual-track decision and its successful implementation. Clearly, the presence of Pershing II and GLCM provides the alliance with a critical capability that we didn't have before and that enhances Western deterrence from a Soviet point of view. The existence of land-based missiles, such as the Pershing II, which are capable of striking Soviet territory and provide long-range attack options, underlines the point. Although the deployment of Pershing IIs and GLCMs is obviously the alliance's most important recent decision, other issues have been actively discussed: command and control and survivability; the question of the nuclear force mix and the size of the

stockpile in the Montebello decision and SACEUR's proposals for implementing that decision; questions related to the nuclear threshold and the extent to which a conventional conflict could be maintained for a respectable period of time; the emerging technology debate; the Conventional Defense Initiative; the American retaliatory chemical weapons capability; and finally, one shouldn't lose sight of the political guidelines for nuclear use, even though they were set aside under the pressure of the 1979 decision.

Although it may sound like an impressive list, it could be seen as a bit complacent. That conclusion would be right. NATO does face a rather formidable list of difficult and intricate issues, several of which are the subject matter of other papers in this volume.

- First, the zero option, the military rationale for it, and the military implications of accepting it are going to bring several questions to the fore. Among these issues are the short-range INF (SRINF) component of the nuclear spectrum: How would NATO handle the SRINF question if faced with the serious prospect of the zero option? Based on SACEUR's report on modernization, what is the role of SRINF of different ranges, especially nuclear artillery? In particular, what is the deterrent effect of SRINF, a question that is going to become considerably more prominent.
- Second, the offense/defense relationship needs to be discussed as it is at the strategic level. There is a certain tendency to think that this relationship was only invented in the last 12 to 18 months; obviously, one is building, to a very large extent, on what has already been done in the past.
- Third, politics again are going to remain difficult to manage, but quite clear: Politics pushed us into the zero-zero concept in 1982. Politics drive the reemergence of zero-zero as a centerpiece of the alliance position in response to the Gorbachev January proposals, and there is no denying it would be very difficult for European governments to publicly argue against global zero-zero in principle. In addition, discussions regarding zero-zero are going to have important political consequences and implications on every modernization decision that lies before us.
- Fourth, what do Americans and Europeans think the role of American SLCMs are going to be in this context: Where do they fit? What are their implications in thinking about future force structure? Would they have any different connotations in force structure terms were NATO actually being drawn down to zero-zero LRINF route? Does that make any difference?

- Fifth, the interaction of French systems and French doctrine with those of the rest of the alliance remains a potentially important increment to the overall deterrent capability of the alliance. However they are organized, clearly the interface needs to be made as effective as possible.
- And, finally, a heading that blends Soviet doctrine and thinking and crisis management. Clearly NATO policy has to be responsive to the way Soviet doctrine and Soviet thinking is emerging. For example, in complement to the High Level Group (HLG) efforts and in the NATO force planning system work to improve survivability through concepts of early dispersal, NATO needs to relate dispersal measures to Soviet doctrine and Soviet perceptions of NATO's doctrine. Those two things are linked, obviously, in rather a complex way, but it is a problem for NATO to disentangle what in Soviet statements represents situations that could draw us into an early nuclear use, which should be played back into planning systems instructions, and what is propagandistic. We tend to credit almost everything we read from Soviet leaders as propaganda, and that needs to be looked at very carefully.

V. THE FRENCH FORCE DE DISSUASION NUCLÉAIRE AND THE SECURITY OF THE FEDERAL REPUBLIC OF GERMANY

by Uwe Nerlich

PREFACE[1]

This paper assesses the political and strategic role of France's nuclear armed forces in light of the modernization of French nuclear forces and the current reorientation in French strategic thinking. The premises of French nuclear policy have changed fundamentally from previous times. At present, an assessment of French and German interests has to examine the significance of French nuclear forces for deterrence, for plausible defense contingencies, and in negotiations on European security. The analysis yields very different conclusions for these three levels, with a positive contribution primarily in the realm of negotiations with the Soviet Union.

THE GERMAN VIEW OF THE FRENCH NUCLEAR FORCE IN A CHANGING CONTEXT

Throughout the 1970s, questions of nuclear deterrence in the Federal Republic came to be, amidst diminishing possibility for any nuclear response, fixated on the role of U.S. nuclear weapons. This approach contained scarcely any categories in which France's self-conception played a role. Rather, it was defined first and foremost by U.S. and Soviet strategic arms limitation. Only as strategic arms control entered into its predictable crisis at the end of the 1970s did the German perspective on nuclear deterrence open out again, without, however, a new frame of orientation. This development was accompanied by France's decision to undertake a thorough modernization of its nuclear forces and by an initial change in the prevailing mode of French strategic thinking, which is supported by the modernization program.

[1]The paper is based on a contribution to a project for IFRI, Paris.

By the mid-1980s, it has once again become evident that possession of nuclear weapons and political status are closely related and that this connection will play an important role in any future political reordering of Europe. This was called to mind by Andropov's disarmament proposal of December 1982 as much as by Gorbachev's proposal of January 15, 1986. Yet in the German estimation, French nuclear forces continue to be secondary, despite the prospect of a multiple increase in French nuclear weapons, unlike the early 1960s when a French arsenal was as yet scarcely effective. The reason for this is that in the Federal Republic a very superficial view of European relations prevails; even today it focuses on strategic arms limitation, which has lost its real meaning.

In the early 1960s, the French nuclear force assumed a central role with respect to West European political integration, but it has ceased to play any role since 1964—since the last, unsuccessful attempt at a prospective foreign ministers conference in Venice where the *force de frappe* was to be accepted as federator. In the meantime, the paramount issue of political integration has all but disappeared from the political agenda. From the standpoint of deterrence, French nuclear guarantee offers are ignored, although they are now accompanied by a change in French strategic thinking away from a sheer sanctuary approach. In the context of nuclear arms control, the French arsenal appears to be more an obstacle to agreements with the Soviet Union and, as a result, its role is minimized despite the modernization decision. These conclusions are further reinforced in a world where the United States and Soviet Union possess strategic missile defenses: The combination of high confidence of Soviet retaliation capability and missile defenses against France would reduce the political and strategic role of the French nuclear forces to a marginal order of magnitude.

Despite French nuclear policy, both doctrine and means, calling for nuclear "signals" prior to the use of strategic weapons, the deeper-seated doubt remains in the two parts of Germany that France will not take part at all in the alliance defense even though there has been a clear indication of a change in French thinking. The suspicion that France is ultimately interested in nuclear-armed neutrality—and this element has indeed played a role in French nuclear policy, especially at the time of Pompidou—explains why the Federal Republic, shaken for a time by anti-nuclear movements, is not surprised by the continuing acceptance of nuclear weapons in France by both the right and the left.

In German eyes, the existence of the French nuclear force neither constitutes a special problem nor contributes to solving German problems. It no longer even comes into play in the reemerging interest in a

stronger "Europeanization" of the defense of Europe, since the aim is to "conventionalize" European defense—lip service to play down the U.S. military role in Europe. The evident German "acceptance" of the French nuclear forces (not even the prospect of the discredited neutron bomb is any exception here) indicates essentially that they play a subordinate role in the prevailing thinking on security policy.

One might add by way of speculation that in the view of those who are spokesmen in setting the political agenda on nuclear matters, a stronger constructive or critical consideration of French nuclear weapons in the Federal Republic would relax the close connection between nuclear weapons and relations with the United States and thus reduce the potential for political mobilization; the government has no interest in taking up any nuclear weapons themes. This progressive narrowing down to questions of nuclear deterrence in the perception of political relations with the United States (a trend that is spreading ominously in the Federal Republic and that, for years amplified by the media, has provided a strain of anti-Americanism) makes the French nuclear force appear as more an unwelcome complication. At a time when France is urging a strengthening of West German relations with the United States anyway, accepting a constructive role for this arsenal would entail a political weakening of German anti-Americanism.

The broad indifference in the Federal Republic toward French nuclear policy and its consequences is ultimately an expression of the more comprehensive dearth that has characterized German policy on Europe since the early 1970s, if not the mid-sixties. Yet it can scarcely last long. Just as in the early 1980s when French thinking on political and strategic questions of nuclear armament entered into a stage of change, so too are European relations as a whole moving toward a situation in which it will no longer be a matter of simply perpetuating the political status quo in Europe and in which the role of the French nuclear force can assume new political importance.

THE POLITICAL AND STRATEGIC ROLE OF THE FRENCH NUCLEAR FORCE IN HISTORICAL PERSPECTIVE

From the beginning, French nuclear policy has had two contending objectives, the relative weights of which have since shifted at various stages: strengthening French autonomy and strengthening France's political leadership role. The former was conceivable only under U.S. strategic superiority and a lasting military commitment in NATO by the United States; only then did ideas of sanctuary and nuclear

neutrality acquire a limited meaning. As soon as these premises were questionable the interest of France was directed, as in the period before the Paris Treaties, to maintaining U.S. military ties to Europe. This was evident in the early 1970s with Pompidou's Chicago speech or the Ottawa Declaration,[2] and in the early 1980s with the insistence on INF deployment in the Federal Republic. Thus, the idea of French autonomy was founded on illusion.

With regard to the latter objective, France can wield political leadership as a result of possessing nuclear weapons or other factors (e.g., by making the most of the Soviet "card") only through voluntary self-constraint and concessions by its partners. In this respect, France has always had veto power, which it could use only so long as the option of French cooperation were not negated.

Ultimately, then, the ability to use French nuclear forces for political and strategic purposes was always a function of the international constellation. The function of this arsenal and the relative weight and reality of those objectives have changed. Therefore, a historical perspective is needed to be able to assess the present change in the political and strategic objectives of the French nuclear force for France as well as for third parties such as the Federal Republic.

Unlike France's, Great Britain's *strategic* interests have always played a central role in the decisions to become a nuclear power, alongside the political interest in maintaining a role as a global power in a period of decline for the British Empire. Churchill and Attlee were equally convinced of the need to ensure Europe's defense with regard to the Soviet Union, especially if the United States withdrew again from Europe. But it took about ten years until nuclear cooperation between the United States and Great Britain, broken off in 1945 despite the Quebec and Hyde Park agreements, was taken up again. This cooperation occurred only to a very limited extent because Great Britain was taking resolute steps to build a nuclear weapons arsenal on its own, including hydrogen bombs. The "special relationship," so often invoked in the context of British-American nuclear relations, thus resulted not from World War II but, inasmuch as it developed at all in the nuclear sphere, rather from British effort that led to eligibility for nuclear partnership, as 1958 confirms.[3]

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[2]"Declaration on Atlantic Relations," June 19, 1974, in Ottawa, printed in *Europa-Archiv*, Vol. 29, No. 15, 1974, pp. D 339–340.

[3]Helmut Handzik, *Die Genesis der Nonproliferationspolitik der USA gegenuber den spateren Nuklearmacten*. Part I: 1943–1954, Ebenhausen, 1967, Stiftung Wissenshcaft und Politik, SWZ-AZ 111; John Newhouse, *De Gaulle and the Anglo-Saxons*, New York, 1970, esp. Ch. 6.

France began to build a nuclear arsenal of its own at a time when Great Britain had become a nuclear power. For France, the critical impetus was the failure of the Suez expedition (although the young nuclear power Great Britain had suffered the same fate) and the loss of Algeria. Especially the latter made a French nuclear force appear a chance to regain the will to national self-assertion, particularly for the armed forces. If the most important impetus came from the experience of national weakness, the distinct cast of French nuclear policy was shaped by several other circumstances:

- The rearmament of the Federal Republic sought by the United States and Great Britain and its integration into the Atlantic alliance aroused the fear of a potentially superior German military force on the continent. German dominance could occur especially in the event of a "peripheral" strategy by the United States and Great Britain, which would not assure a lasting Anglo-American presence on the continent.[4] This fear had led to the collapse of the European Defence Community (EDC) and reappeared at the time of Pompidou, when France was already a nuclear power. The interest in maintaining the "difference in nuclear status" with regard to the Federal Republic, which was also supposed to preclude for good the problem of a German threat, found its distinct expression in the French advocacy of the Nonproliferation Treaty, to which France never considered acceding.
- Precisely because the Federal Republic hoped to raise its own political status through its contribution in conventional forces, the attendant problems for France, including those of political relations on the continent, would necessarily be fundamental.
- At the same time, forgoing nuclear status alongside the nuclear power Great Britain and the potentially superior conventional military power West Germany would have sharply diminished France's prospects as Europe's leading continental power and of being accepted by the United States as its main ally alongside insular Great Britain.[5] However, the scarcely episodic fate of de Gaulle's directorate idea necessarily dampened the expectations that were bound up here with possession of nuclear weapons.[6]
- The dramatically widening disparity between the two Western nuclear powers and the nonnuclear states of the alliance

[4]Nathan Leites, Christian de la Malène, *Paris from EDC to WEU*, The RAND Corporation, RM-1668-RC, 1957, pp. vii and 167 ff.

[5]Gerhard Wettig, *Entmilitarisierung und Wiederbewaffnung in Deutschland 1943–1955*, Munich, 1967, esp. pp. 646–664.

[6]Ibid., pp. 558–559.

because of the introduction of thermonuclear weapons and, as tactical nuclear weapons were introduced, the increased military integration of NATO under strict American or Anglo-American control did accord with the French interest in a continuing U.S. military presence while sharpening the French need for national self-assertion. It was precisely the strategic dominance of the United States in the alliance, as well as its strategic superiority over the Soviet Union, that offered France the possibility of achieving an independent political status on the way to obtaining nuclear weapons—in a state of peace guaranteed by the United States, so to speak, even if in a state of war this were to worsen the situation of the West overall.

- French thinking essentially assumed a state of peace anyway. Thus it had been widely assumed in Paris, with de Gaulle leading the way, that the EDC and West German membership in the alliance could be made superfluous by "grand negotiation" with the Soviet Union.[7] Ultimately this also marked the conception of a Europe "to the Urals." Such a way of thinking enabled French policy, more so than that of the other West Europeans, to tackle questions concerning the political order of Europe and in this respect correspond with Soviet policy. Yet it also made it much more difficult to plan for war with France in the alliance.
- For a long time, the Soviet Union associated the French nuclear force primarily with French efforts to restructure the European political order. Thus, in the mid-1960s in a famous dispute between General Ailleret and General Rotmistrov, the latter characterized the *force de frappe* as a tool of diplomacy that was a last means of restraining U.S. hegemony in Europe. Since, in the MLF context, this did lead to deep rifts in the Atlantic alliance, the Soviets welcomed the *force de frappe* as an instrument of "peace."[8] The subsequent Soviet accounts of the "growing" French and British threats[9] were surely more an expression of Soviet negotiating interests than of real fear. French policy could thus assume that its own nuclear forces would constitute no strain on relations with the Soviet Union, but would rather broaden the possibilities for diplomatic maneuver for Moscow

[7]Leites, de la Malène, 1957, pp. 143–156.

[8]*Zeszyty teoretyczno-polityczne*, Warsaw, 1965, No. 3 (German printed in *Ostprobleme*, No. 9/10, May 21, 1965, p. 270 ff.)

[9]V. Pustov in *Roter Stern*, March 31, 1984.

too.[10] The small scale of the French nuclear forces and the obvious discrepancy between military means and political ends necessarily reinforced this impression.

- Thus a nuclear force of its own afforded France political dividends at several levels: (1) on the European continent as sole Western nuclear power, though limited by the deployment of American and British nuclear weapons; (2) with regard to the United States as a sign of independence from American dominance in the integrated alliance system, though limited by France's own need for protection; and (3) with regard to the Soviet Union as an independent negotiating partner, though limited by the inability to dispose of questions of German status (which was particularly evident in the case of German Ostpolitik) or of the American presence in Europe.
- In the early 1960s, after the demise of the directorate idea, France sought to incorporate defense into and thus shape the revived West European integration in such a way that, owing to its nuclear status, France would inevitably assume the role of political leadership in the nascent structure, paradoxically only because France's partners, above all the Federal Republic, took seriously the extreme case of conflict which France itself tended to regard as improbable.[11] That is, by its own strategic premises France would have been in no position to raise such a leadership claim in this way. However, it was precisely the primacy of military cooperation in the policy of German integration that then led to the failure of French policy: The primacy of the United States as protective power had to be decisive in the German view, all the more so as de Gaulle's policy seemed to expect from Bonn an explicit opting against the United States.
- The French response was to play out the third and last option after the directorate and federator options, the Soviet card. This French policy was then inevitably overtaken by a German Ostpolitik, which could only succeed in conjunction with a U.S. Eastern policy originally motivated in no small measure by de Gaulle.

Thus, the late 1960s marked the end of an era. In efforts to restructure European relations, France had repeatedly tried, in three different variations, to derive political advantage out of possessing a nuclear

[10]See also Robbin F. Laird, *France, the Soviet Union, and the Nuclear Issue*, Boulder, Colorado, and London, 1984.

[11]Uwe Nerlich, "Die nuklearen Dilemmas der Bundesrepublik Deutschland," *Europa-Archiv*, Vol. 20, No. 17, September 1965, pp. 637–652.

force. In all three cases, the partners would have had to make concessions for which there were no recognizable grounds. The United States saw no reason to share a world power role with France and to concede French primacy in Europe. The European allies could scarcely see any advantage in rewarding France's nuclear status within a political union at the expense of their own sovereignty, especially since Great Britain would not have joined the union and the French nuclear force would be of rather marginal military significance. Finally, the Soviet Union would ultimately have to give up its political control over Eastern Europe. Yet a Europe to the Urals, whose possible advantages for Moscow were otherwise not at all obvious, would leave uncertain the structure of relations with the United States, the Soviet Union's real counterpart, and could not ensure U.S. interest in withdrawing from Western Europe.

In a phase in which the French arsenal barely existed, or only on a small scale, French nuclear policy was thus characterized by an extreme discrepancy between means and ends. In the 1970s, the situation changed markedly; the size of the French nuclear forces had increased. A broad cooperation with the Soviet Union was in the offing. The United States seemed to have an interest in reducing its role, or at least its burdens, in Europe. The dualism in Bonn's policy, wanting to pay heed to Washington and Paris simultaneously, receded as the anti-American element subsided (disregarding the Jobert episode) and as West European unity appeared to be less and less a function of military cooperation. These would be better premises, one might conclude, for a continuation of French nuclear policy in the style of the sixties. Yet it was above all the primacy of military cooperation in the politics of integration and the serious-minded anti-Americanism in French foreign policy that gave this policy its perspective at all. The loss of U.S. strategic superiority and thus the weakening of nuclear deterrence also threatened the security and the political latitude of France. The tendencies toward unilateral U.S. troop withdrawals threatened at once to weaken defense capability and to lower the nuclear threshold, which alone could protect France from fatal alternatives in the event of war. West German Ostpolitik once again aroused the fear of the Federal Republic's drifting away; and France was indeed losing political influence with Bonn as a result, without being able to assert a stronger policy of integration aimed at binding the Federal Republic.

Thus French policy, which in the 1960s was still so emphatically bent on deriving political advantage from the possession of nuclear weapons, in the 1970s boiled down to diligently maintaining the political commitments of the two partners. The only seemingly paradoxical

result of this development was the unprecedented phenomenon of a Socialist President supporting a Conservative German government on the issue of deploying U.S. intermediate-range nuclear weapons.

For reasons that were largely independent of French policy, this development finally led to a renewed strengthening of the political ties between the United States and the Federal Republic in the alliance. Domestically, an active foreign policy founded on the possession of nuclear weapons and aimed at demonstrating within an assertive national will and a political capacity for action was supplanted by a domestic policy geared to maximum consensus. This domestic policy did in fact reveal an ever-present assertiveness, evident also in the approval of nuclear arms, yet it is in large measure accompanied also by immobility in foreign policy.

Together, the real growth in the French nuclear forces, the weakening of the U.S. deterrent shield for Europe, the consideration for domestic consensus, and the increasing military capability of the Soviet Union in Europe compelled France to contemplate the strategic war contingency in political terms. This was reinforced as the introduction of French tactical nuclear weapons threatened particularly the vital interests of France's most important ally, West Germany, whose integration in the West had to be strengthened, but with whom political commitments regarding these weapons were not considered acceptable. In other words, the more the political instrumentality of the French nuclear force was lost, the more its strategic role came onto the political agenda, which necessarily accelerated the loss of political instrumentality even further. This has been perceived from a very narrow standpoint, as the dominant perspective in Western Europe tends to misjudge the political importance of strategic realities.

Should it meanwhile prove true that the process of change in European relations has indeed begun, then how, particularly from the German standpoint, will the political and strategic role of the French nuclear force present itself in the future? Will the possession of nuclear weapons again yield France political options or will an increasing strategic importance of this arsenal pose political consequences?

OPTIONS AND PERSPECTIVES AS EUROPEAN POLICY BEGINS A NEW PHASE

There is ample indication that following upon a first phase in which France's as yet strategically inoperative nuclear force was supposed to yield political advantage in reordering European relations, and a second phase in which the buildup of its nuclear forces was geared chiefly to

preserving U.S. and West German commitments, that now a third phase has begun. In the first phase France pursued an unparalleled, expressly anti-status-quo policy, without having the requisite means or ability to give the concerned allies or adversaries grounds for corresponding self-constraint. In the second phase it largely gave up these political objectives, though in effect retaining the underlying conceptions of Europe, and built up a nuclear force mitigating the ends-means discrepancy of the sixties only by the fact of its existence, not by virtue of its properties.

Since the beginning of the 1980s, something new is underway. Noteworthy here is the fact that once the Hades is introduced, tactical nuclear weapons are no longer to be handled as organic weapons but rather placed under a special command directly subordinate to the armed forces chief of staff. Together with the greater range over the Pluton, this allows enhanced operational flexibility and longer-range planning arrangements. Above all it frees the First Army for conventional operations at an earlier stage of a conflict without this being misunderstood, given the nature of organic weapons, as a "signal." This at least reduces the danger that French forces have to resort to nuclear weapons when conventional defense is still holding in other sectors. This in itself represents a greater compatibility with the nuclear operational planning of NATO. Increased flexibility results also from the introduction of long-range air-to-ground missiles (up to 1000 km) as well as from the modernization of the strategic arsenal.[12] These developments reflect the increasing insight on the part of the French that the mere possession of nuclear weapons no longer affords any political advantages if it does not also create for third parties—allies as well as adversaries—recognizable, credible nuclear response options.

Here again we see the difficulty. France could allow itself to reject the NATO strategy of flexible response as long as the effectiveness of this strategy could still be considered sufficiently credible for the foreseeable future. In these circumstances, it was of secondary importance that the French armed forces were lacking the requisite operational flexibility to be really serviceable to the NATO strategy. At present, however, it is becoming increasingly evident that France, just as much as its allies, must be concerned about the continued effectiveness of this very strategy, and the reflections of François de Rose may simply make it especially conspicuous that there are in fact these concerns in

[12] Laird, *France, the Soviet Union, and the Nuclear Weapons Issue*, pp. 54–66; David Yost, *France's Deterrent Posture and Security in Europe, Part I: Capabilities and Doctrine*, IISS, London, 1980, Adelphi Papers, No. 194.

France.[13] But this means that France can no longer confine itself to political appeals to allies, as in the INF debate, but faces the inescapable question of how a common alliance strategy can be maintained and what is required from the French side, where a French sanctuary strategy promises no real options.

Again, there are many indications that a process of rethinking has started in France,[14] though it remains to be seen how the spring elections will affect this. In this connection it is fundamental to have established with France a common assessment of the development of the military threat. This is especially so for the developments in the Warsaw Pact suggesting that the Soviet Union is striving for the capability to conduct a conflict by conventional means only—to keep it limited in terms of Soviet political objectives and bring about a decision before a nuclear response by NATO is possible, or else simply to stifle such a response. Conflict would cease as soon as certain strategic goals were reached and an irreversible change in the postwar political structures was assured consistent with Soviet policy. In its basic documents on the selective employment of nuclear weapons NATO itself foresees a limitation. Optimally the Soviet Union would have to forestall such a selective employment. With the option of a conventional decision, however, the Soviet Union would not lose its previously dominant strategic options, which strengthens the prospects for an effective limitation of conflicts from the Soviet standpoint. NATO must therefore attempt to deny the Soviet Union the confidence of being able to decide a conflict conventionally, yet must have sufficient surety that a selective nuclear weapons use limits the conflict but does not fall short of its strategic political purpose.

Conflict limitation by the Soviet Union would perhaps mean Soviet partial occupation of Western Europe; but a decision on Soviet terms would doubtless alter the political structure of Western Europe so greatly that the West European states unoccupied would have to adapt themselves. Soviet political control over Central Europe would fundamentally alter the situation of France as well.

NATO's strategic requirements include gaining sufficient time by means of conventional defense, being able to bring in reserves, making the Soviet offensive more dependent on reinforcements while encumbering these reinforcements, and above all not losing the air war, especially not at an early stage. Besides several measures in the conventional sphere, NATO must possess a capability to make selective

[13]François de Rose, *European Security and France*, University of Illinois Press, Urbana, 1984.

[14]Ibid., p. 87.

nuclear strikes that give a maximum of political control so as to be able to limit conflicts.

This capability might not be adequately provided by the traditional means, political guidelines, etc.; instruments of strategic political coordination are needed. This means that the French conventional armed forces will have a critical importance precisely in the politically most plausible contingencies for the 1990s, even though they are not optimal in size, armament, and deployment. In this case, however, France's nuclear forces would be either irrelevant or even an unwelcome strategic complication. Particularly, the strategic weapons would scarcely come into consideration for use, while the so-called tactical or "pre-strategic" nuclear weapons not only have no adaptable operational flexibility but lack all the prerequisites for a joint selective action in the framework of NATO. Thus, in the event that French "pre-strategic" weapons were employed, the NATO concept of selective use, which is difficult to apply in any case, would be even more imperiled. It would be practically impossible for the Warsaw Pact to recognize those constraints without which, at least by Western expectations, Soviet constraint is scarcely practicable.

This state of affairs becomes important when Soviet military force buildup is being carried out with a dual purpose: (1) to demonstrate in peacetime that NATO is progressively losing its potential for military responses, which is then supposed to cause political consequences that would ultimately amount to a self-dissolution of the alliance; and (2) to possess the capability for deciding an actual conflict according to one's own political objectives. Thus, were the alliance subsequently incapable of responding to an attack with short preparation time, or were the Soviet Union to gain the confidence of being able to decide a conflict by conventional means, then this would have drastic consequences not only in the case of a military conflict but in peacetime also. That means that the political deterrent effect of the French nuclear forces would not alter such a situation—would be negligible; neither in a conflict nor in peace could it prevent the emergence of a situation that is completely intolerable for France and for the rest of the alliance. Nor would the often-cited argument of added uncertainty in Soviet risk perception change this in any way, although in no other contingency would uncertainty similarly raise the deterrent effect, or rather, in no other case is reliability of military operations so essential for the attainment of Soviet objectives.

For France the consequence of this development would be that strengthening NATO's and France's conventional forces is a prerequisite for the continued effectiveness of the NATO strategy, which protects France too, and that if these forces are not strengthened, a

selective use of nuclear weapons—without which a defense could not be sustained nor could a war be terminated short of defeat—becomes increasingly impossible. Again, a NATO capability to make selective strikes would be no less important for the security of France than for the other allies, although paradoxically the existing French nuclear forces, as indicated, tend to limit this capability even further.[15] At present, questions of how to assess matters if France were prepared to undertake the requisite close coordination for concerted nuclear operational flexibility, or how a greater coordination of French and British nuclear forces would increase operational flexibility, have to be considered academic.

Thus the French nuclear force can even constitute a dangerous complication in a defense situation, something McNamara anticipated in abstract form in his Ann Arbor speech back in 1962, although it scarcely contributes anything to deterrence in the most probable cases of conflict. But there is yet a third level at which its value should be considered, that of possible agreements with the Soviet Union on changing the security structure in Europe, particularly in the way of traditional arms control. At this level, where there can be changes in European political structures in peacetime, in many cases (especially at the time of de Gaulle) French policy, unlike American policy, has had the preeminently political significance of security structures in mind. What is more, the French nuclear force itself represents an element of this security structure—an "odd element" as it were—that can no more be integrated into hegemonically designed Soviet security proposals than into unpolitically conceived American arms control concepts. This is of importance particularly when the changing of Europe's security structure in peacetime is recognized as the overriding Soviet objective. To be sure, the Soviet Union is increasingly trying to take this state of affairs into account. The Gorbachev proposal of January 15, 1986 departs markedly from the traditional Soviet proposals from SALT I to the INF proposals, which always amounted to a form of counting the French nuclear forces as part of the American arsenal. Yet the unreality of the Soviet three-stage proposal again limits this as much as the fact that the Soviet Union would have to seek direct negotiations with France (as well as the other nuclear weapons states besides the United States)—that France would have a veto role and its own voice in shaping the outcome of any such negotiations.

This circumstance comes together with the fact that the French nuclear forces not only enjoy a high degree of acceptance in the French

[15]Under conditions of a missile defense on both sides, these problems would become even more critical for France, both strategically and in terms of costs.

public, but continue to play an important role in maintaining France's national will. At this level, then, the classical close connection between possession of nuclear weapons and objectives regarding the political order in Europe, which marked the early phase of French nuclear policy in particular, has been reestablished. This also allows for a policy that, despite the fundamental strategic political problems, is geared to less disproportionate problems than in the early period. From this perspective a modernization of the French nuclear forces is also politically important, though the extent still envisioned cannot be justified with regard to the financial burden and the strategically paramount tasks.

The irony of the development lies in the fact that in the first stage of French nuclear policy there was a discrepancy between political goals and (nuclear) means and the latter were inadequate; whereas for the third phase it is becoming evident that conversely, to the detriment of the French budget and joint operations, there is an increasing discrepancy between political goals and unnecessary (nuclear) means. This circumstance becomes especially important because the strategic value of the "multiplied" nuclear forces for defense as well as deterrence is, again, dubious.

For the Federal Republic it will be important to work out with France a common assessment of the threat and especially of the Warsaw Pact's capability to effect a conventional decision, and to encourage France to take measures that maintain the effectiveness of the NATO strategy. But Bonn should also work out with France an understanding of European security found in the French categories of a European order.

CONCLUDING OBSERVATIONS

This political and strategic assessment of the *force de dissuasion nucléaire* assumes added importance in the context of current considerations regarding a European zero option for intermediate-range missiles, as have occupied the alliance since this proposal was uncoupled from the Gorbachev plan of January 15, 1986. In this connection the following observations are in order:

- The zero option—a treaty agreement not to deploy U.S. intermediate-range weapons in Western Europe for some quid pro quo—raises fundamental questions about the maintenance of NATO's deterrence strategy and for the foreseeable future can in no way be justified on strategic grounds.

- However, were a treaty of whatever kind resulting in a withdrawal of American INF nevertheless to come about, then the French and British nuclear forces would have to acquire completely new functions.
- In the event of a zero option for the American INF, it would be imperative to raise the strategic operational flexibility of the French and British nuclear forces. This would lend added importance to the current modernization programs of France and Great Britain, also from a German standpoint. Under no circumstances should it be acceptable that France and Great Britain forgo a modernization program in the context of a European zero option, unless a long-term phased plan for nuclear disarmament were realized.
- This also means that the Federal Republic's declared support for a complete ban on testing must be reconsidered. Although France would not be bound by such a test ban, France's potentialities for realizing a modernization program would be complicated at the expense of German strategic interests, and political relations with France would be strained. With some qualification the same might be true for Great Britain.
- Effectively raising the operational flexibility of the French and British nuclear forces would ultimately demand that the rotation procedures for SSBNs be coordinated and that operational possibilities for coordinated action be prepared.
- For the Federal Republic the question of participation in the operational planning for these potentials would be altered by a zero option for American INF. Under such circumstances the Federal Republic would have to have every interest in clarifying the role of these forces for a spectrum of contingencies relating to Central Europe, to such an extent that a common deterrence strategy, which for the foreseeable future is inconceivable without nuclear means for escalation, remains possible at least in the sense of the Ottawa Declaration.
- The Western alliance's preconditions for a European zero option should be understood in such a way as to take these requirements into account.

VI. SOVIET MILITARY ASSESSMENTS OF AND COUNTERS TO WESTERN STRATEGY: A U.S. PERSPECTIVE

by Dennis M. Gormley

The Soviet accumulation of military power over the past 35 years has prompted a continuing search in the West for insight into the underlying motivations for Moscow's huge defense expenditures. Opinions range from an innate desire on the Kremlin's part to alter the international environment through actual use of military force to the USSR's obsessive fear of potential U.S.-led aggression fueled by her perceived inferiority with regard to Western technological prowess. Like most complex issues, truth probably lies somewhere in between. But what is clear is the Soviet Union's intent to procure sufficient military power to challenge both the operational utility of Western strategy (under any conceivable military circumstance) and the political consensus needed to sustain its credibility within the Alliance.

My purpose here is to examine changes in Soviet strategy and military forces in the last 35 years, especially as they have been shaped in response to Soviet views of Western extended deterrence. To the extent supporting evidence will permit, this paper explicates Soviet uncertainties regarding the application of military force and potential solutions to operational dilemmas. The paper concludes with a brief discussion of Soviet uncertainties about the long-term military competition with the West.

HISTORICAL REFLECTIONS

Despite the ostensible clarity of thought in contemporary Soviet planning norms, historical antecedents reveal some rather abrupt changes in military thought and force structure over the past 35 years. After first appearing to eschew analyzing the implications of nuclear weapons for combat operations under Stalin, Soviet military authorities shifted emphasis, aided, to be sure, by Khrushchev's urging, to nearly an exclusively nuclear orientation in the first half of the 1960s. From about 1965 to the present, Soviet military thought reflects a more even approach to assessing the threats inherent in Western strategy and to establishing requirements for military procurement. Indeed, the last two decades of Soviet military thought and development represent a

persistent search for, and in large measure the achievement of, increasingly more flexible means of employing military power.

The last three and a half decades of military thought and force development have produced a consistent set of Soviet views about the most probable military contingencies. Broadly outlined, they include three major courses of conflict.[1]

1. *Massive nuclear strikes used at the outset of conflict to the full depth of relevant theaters of military operations (TVD).*[2] Such a contingency would immediately involve using Soviet homeland-based strategic nuclear forces against European targets, with follow-up exploitation by Warsaw Pact ground and air forces.
2. *An escalating conflict in which an initial (and fairly short) period of conventional operations precedes an increasingly more widespread use of nuclear weapons.* The nuclear phase of such a conflict could proceed immediately to the use of Soviet homeland based forces, or more likely would begin with tactical nuclear weapons and thereupon escalate rapidly to general nuclear warfare.
3. *A conventional-only conflict in which major strategic operations are successfully carried out within one or more TVDs without recourse to nuclear weapons.*

It is unclear precisely what factors most influence the development of new Soviet doctrine and supporting military instruments. Nonetheless, the general outlines of the reciprocal relationship between doctrine and technology are evident in the Soviet force deployment process. In this regard, the force development process reflects a complex, interactive association between doctrine and technology in which, as David Holloway writes, "technological change exerts a determining influence on the methods of warfare, but doctrine has a significant role in adapting those methods to new weapons."[3]

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[1]For a recent discussion of likely contingencies, see LtGen M. M. Kir'yan (ed.), *Military-Technological Progress and the USSR Armed Forces*, Voyenizdat, Moscow, 1982, pp. 312–313.

[2]Soviet military authors define the TVD as a large geographic area that "permits the concentration and deployment of strategic groupings of forces and the carrying out by them of military operations in accomplishment of strategic mission." This definition is cited and discussed in Dennis M. Gormley, "Understanding Soviet Motivations for Deploying Long-Range Theater Nuclear Forces," *Military Review*, September 1981, pp. 20–34.

[3]David Holloway, "Doctrine and Technology in Soviet Armaments Policy," in Derek Leebaert (ed.), *Soviet Military Thinking*, Allen and Unwin, London, 1981, p. 266.

Within this interdependent relationship, other factors impinge upon the force development process.[4] Soviet perceptions of potential adversary doctrinal and technological challenges play an important role. Doctrinally, the Soviet Union has witnessed several abrupt postwar shifts in U.S. military policy—Eisenhower's "massive retaliation" and Kennedy's "flexible response" are only the most glaring examples. Technologically, the Soviet military must cope with high levels of innovation and technical virtuosity in Western military developments. Finally, the bureaucratic politics of the Soviet military-industrial complex obviously affect the force development process. Khrushchev used military doctrine to divert resources from the military into the civilian sector of the Soviet economy. And numerous struggles for power and resources between and within the branches of the Soviet armed forces conditioned the process of force development.[5]

Former chief of the Soviet general staff Marshal Nikolai V. Ogarkov views the creation and production of sufficient quantities of new weapons as the starting point of the force development process.[6] Once the process is begun, this "new qualitative condition" influences the development of new forms and methods of combat, as well as the organizational structure of the armed forces. For example, quantitative and qualitative improvements in conventional military forces have caused a radical shift in Soviet views on the use of these weapons as instruments of military strategy. The Soviets no longer see theater-based missile and air forces as just follow-up forces to strategic and long-range theater nuclear forces. Instead, especially with the mass introduction of highly accurate conventional systems, the Soviets regard these weapons as a means to achieve the decisive results hitherto thought possible only with nuclear weapons.

THE 1950s: EARLY TEMPORIZING

The temporizing attitude of the Soviet military toward nuclear weapons had less to do with Stalin's reputed hammerlock on doctrinal formulation than with what appears in retrospect to be a reasoned assessment of the limited effect on military operations of available

[4]For a detailed discussion of these factors, see Dennis M. Gormley et al., *Soviet Perceptions of and Responses to U.S. Nuclear Weapon Development and Deployment*, Pacific-Sierra Research Corporation, PSR Report 1211, June 1982.

[5]Edward L. Warner, *The Military in Contemporary Soviet Politics*, Praeger, New York, 1977, pp. 153–155 and 175–188.

[6]N. V. Ogarkov, *Always in Readiness to Defend the Fatherland*, Voyenizdat, Moscow, 1982, p. 83.

nuclear weapons.[7] Stalin clearly appreciated the need to develop and produce atomic weapons and suitable delivery means; however, he saw little reason to downgrade his "permanently operating factors" of warfare as determinants of the course and outcome of future wars, for simply too few atomic weapons were then available to influence warfare *decisively*. In fact, it is doubtful that more than a few atomic weapons were available for use before Stalin's death in 1953. Stalin had only set the stage for producing large numbers of regional delivery systems (primarily by commissioning the Tupolev TU-4 and TU-16 bombers and the Yangel SS-4 medium-range ballistic missile), the most important of which would not be deployed in militarily significant numbers until the mid- to late 1950s. The Soviet Union's principal adversaries (in the late 1940s and early 1950s) confronted Soviet planners with a substantial conventional threat, together with a maturing, but nonetheless small, stockpile of atomic weapons.[8] In retrospect, it should not seem odd that Stalin and his theoreticians managed only to *study* nuclear-related problems, rather than fully comprehend the implications of, and prepare for, nuclear warfare.[9]

Most Western analysts view Stalin's passing as unleashing a flood of changes in the Soviet approach to nuclear warfare. Equally important were developments in U.S. nuclear strategy and force structure. The Eisenhower administration placed nuclear weapons, strategic and tactical alike, at the center of its declaratory and operational policies. The force structure consequences included a ring of B-47 bomber bases around the periphery of the Soviet Union, with decreased emphasis on conventional ground forces.

But perhaps of greater importance to Soviet nuclear developments were U.S. decisions on tactical nuclear weapons made in the early 1950s. Project Vista, hosted by the California Institute of Technology in 1951, drew attention to the role of nuclear weapons in land warfare. That same year the United States tested the first subkiloton atomic weapons. Two years later, the United States deployed the first nuclear-capable artillery weapons, followed the next year by the Honest John rocket system and the Matador cruise missile. Deployments of shorter range nuclear weapons complemented those required by the doctrine of "massive retaliation." To that end, NATO's Political

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[7]For a thoughtful treatment of this issue, see Notra Trulock III, "Weapons of Mass Destruction in Soviet Military Strategy," an unpublished paper presented at the Joint Conference on Soviet Military Strategy in Europe, sponsored by the Boston Foreign Affairs Group and the Royal United Services Institute for Defense Studies on 24–25 September 1984, Oxford, England, pp. 10–30.

[8]Ibid., p. 14.

[9]Ibid., p. 15.

Directive of 1956 called for early initial use of tactical nuclear weapons to counter a Warsaw Pact invasion while the United States was launching a strategic nuclear attack against the Soviet Union.[10]

The Soviets were impressed by these developments.[11] Although they continued to deny that strategic nuclear weapons would decisively influence warfare, they acknowledged that shorter range nuclear weapons enabled the defender to thwart the offense's effectiveness. Indeed, NATO's deployment of a tactical nuclear arsenal directly imperiled the Soviet concept of offensive operations, based on the traditional principles of mass and concentration of force. The response to this challenge entailed a massive effort to mechanize the ground forces and to modify the principles of mass and concentration through the adoption of new dispersal norms. Mechanization of the ground forces, of course, concurrently afforded Soviet units the resources to exploit their own nuclear strikes. Recognition of this development provided the basis for integrating shorter range nuclear weapons into the Soviet force structure.

Soviet developmental efforts in shorter range nuclear weapons in Stalin's last years were not entirely dormant. At least two variants of an operational-tactical rocket were tested by 1950.[12] Stalin probably initiated development of the Scud operational-tactical missile and the Frog tactical rocket a year or two before his death. Before the development of Scud (1957) and Frog (1958), Soviet ground forces could probably count on limited nuclear support from short- and medium-range bombers. In fact, by 1954, Soviet military exercises began to include air-delivered atomic weapons in support of the ground forces. This attempt was the first to incorporate nuclear weapons into the fire support available to *front* and army commanders. Interestingly, this *front* and army support consisted of nuclear strikes into the operational-tactical depth of the enemy against such targets as enemy airfields and air command and control facilities[13] —a targeting theme wholly consistent with contemporary Soviet nuclear *and* conventional strike planning.

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[10]Robert C. Richardson, "NATO Nuclear Strategy: A Look Back," *Strategic Review*, Spring 1981, pp. 40–41.

[11]For a discussion of the influence of these events on Soviet decisionmaking, see Douglas M. Hart and Dennis M. Gormley, "The Evolution of Soviet Interest in Atomic Artillery," *Journal of the Royal United Services Institute for Defense Studies*, June 1983, pp. 25–34.

[12]Trulock, 1984, p. 13.

[13]P. Galin, "Aircraft and Rocket-Carriers of Tactical Nuclear Weapons," in P. T. Astaskenkov (ed.), *Atomic Energy in Aviation and Rocket Technology*, Voyenizdat, Moscow, 1959, p. 48.

The Soviets decided to develop nuclear artillery even though their military theoreticians remained unconvinced that nuclear weapons would decisively influence the course and outcome of warfare. They saw these weapons as mere supplements to traditional forms of firepower—artillery, small arms, tanks, and aircraft.[14] At the same time, however, the Soviets built a large force of medium-range bombers and began developing medium-, intermediate-, and intercontinental-range ballistic missiles to counter the forward deployment of U.S. and British strategic aircraft. Given priority requirements in the strategic area, it seems plausible that critical shortages in raw (fissile) material impeded further development of Soviet nuclear artillery at this stage. Indeed, such shortages may well have delayed a rapid buildup in tactical nuclear delivery means, which Soviet military authorities found to be more in tune with Khrushchev's budding "revolution in military affairs" than cumbersome artillery pieces.

Despite the slow buildup of Soviet nuclear capability, sufficient quantities of nuclear weapons were beginning to change Soviet views on the role of these weapons. By early 1958, the Soviet general staff had decided that military doctrine and strategy required fundamental revision to reconcile the implications of nuclear weapons, especially the nuclear missile weapon.[15]

1960–1964: KHRUSHCHEV AND THE MASSIVE-USE OPTION

Creation of the Strategic Rocket Forces (SRF) in December 1959 and Khrushchev's announcement of a new military doctrine before the fourth session of the Supreme Soviet in January 1960 represented no abrupt change in Soviet military thought. To be sure, the resolution of internal military debates in the late 1950s was important in this transformation; but of critical importance to this new stage in force development was the availability of sufficient quantities of nuclear weapons. From 1957 to 1960 the Soviets deployed no fewer than seven new theater nuclear weapons.[16] This new quantitative condition greatly

[14]G. Pakrovskiy, "Weapons in a Modern Army," *Marxism-Leninism on War and the Army*, Voyenizdat, Moscow, 1955, p. 168, as cited in Thomas W. Wolfe, *Soviet Strategy at the Crossroads*, Harvard University Press, Cambridge, 1964, p. 155.

[15]Oleg Penkovskiy, *The Penkovskiy Papers*, Ballantine Books, New York, 1982, p. 162.

[16]Included were the SU-7 ground-attack aircraft, the AS-2 air-to-surface missiles, the SS-N-3 sea-launched cruise missile, the SS-N-4 submarine-launched ballistic missile, the SS-4 medium-range ballistic missile, the SS-16 Scud operational-tactical ballistic missiles, and the Frog-1 rocket.

influenced the development of new forms and methods of combat and corresponding changes in force structure.

Khrushchev's new military doctrine specified that a future war involving the USSR would be an all-out coalitional conflict in which nuclear escalation would be inevitable. In fact, massive nuclear strikes would occur immediately, or almost immediately, upon war's breakout. The new nuclear missiles of the SRF would decisively determine the course and outcome of such a conflict.

The campaign in European TVDs would be fought within the framework of a general war opening with massive nuclear exchanges. The Soviets pictured the outbreak being initiated by the West's massive surprise attack, to which the SRF would respond with rapid strategic nuclear strikes followed by a full-scale theater offensive against NATO Europe. Soviet ground forces were to exploit the nuclear strikes of the theater component of the SRF (SS-4 medium-range missiles and Badger medium-range bombers).

Absent from the new military doctrine was the notion that any restraints could be imposed on the conduct of war. A doctrine espousing global nuclear war and the rapid seizure of objectives to the full depth of TVDs was unsuited to graduated or discrete operational concepts. The theater campaign would begin with strikes conducted by homeland-based strategic forces, *followed* rather than *preceded* by massive nuclear strikes of the Rocket and Artillery Troops of the ground forces. Of course, such a counterescalatory notion (escalation in reverse, in effect) was equally fundamental to the then-current U.S. strategy of "massive retaliation."

The actual disposition of Soviet forces also played a major role in shaping Moscow's view of escalation. In 1960 Soviet strategic forces were at best fragile. The USSR possessed some 145 long-range bombers (of which only 35 were jet aircraft) and four SS-6 intercontinental ballistic missiles (ICBMs). The Soviet regional-range force was in better shape, having some 200 SS-4 medium-range ballistic missiles (MRBMs) and 1,000 medium-range jet bombers.[17] All these weapon systems were vulnerable to strategic and forward-based U.S. forces. Both Soviet ICBMs and MRBMs had soft platforms, required considerable time to be readied for firing, and could not remain on high alert very long. Soviet bomber airfields were vulnerable to attack by 105 U.S. Thor and Jupiter missiles deployed in the United Kingdom, Italy, and Turkey as well as by 1,178 B-47 medium-range jet bombers that could be forward-based in Europe and North Africa during a

[17]Robert Berman and John Baker, *Soviet Strategic Forces: Requirements and Responses*, The Brookings Institution, Washington, D.C., 1982, p. 138.

crisis.[18] Clearly, to ensure the survivability of their strategic and intermediate nuclear systems, the Soviets would have to use them early (preemptively if possible) in a conflict.

Khrushchev's "new military doctrine" prompted a major reevaluation of defense priorities and service roles in the context of a nuclear-missile war. The centrality of the nuclear-missile weapons in the institutional debates over resource allocation signified much more than simplistic fascination with the absolute qualities of nuclear missiles or an imperative to respond to the Kennedy administration's plan to modernize and expand the land- and naval-based components of U.S. strategic nuclear forces. Equally important (especially to military planners), nuclear missiles permitted achieving military objectives that, in the past, could be obtained only through time-consuming, sequential operations of vast human and materiel proportion. Soviet military theoreticians recognized that the unique properties and characteristics of the nuclear missile radically altered these conditions. Striking to the full depth of the TVD in the shortest possible time is the foundation upon which requirements for the massive theater nuclear option were, and continue to be, formulated.

The qualitatively new nuclear-missile weapon, once deployed in sufficient numbers, substantially influenced the articulation of new forms and methods of combat (captured in Sokolovskiy's *Military Strategy*), as well as the organizational structure of the armed forces (with the creation of the SRF, Rocket Troops, and Artillery, and corresponding reductions in resources for other general-purpose forces). As is well known, Khrushchev exploited the opportunity to reduce defense spending for large ground, air, and naval surface forces.

Khrushchev's concentration on deterrence in strategic force allocation obscures the underlying military rationale for deploying large numbers of long-range theater nuclear missiles. Certainly, in relation to the United States, Khrushchev saw great deterrent value in deploying SS-4s and SS-5s (from 200 in 1960 to 705 by 1965) to perform the role large ground forces previously played: holding Western Europe hostage. But seeing this role exclusively as a stopgap until sufficient Soviet ICBMs could be deployed is shortsighted. Indeed, this myopic view of the rationale for Soviet long-range theater missiles partly accounts for the surprise in some Western circles surrounding the Soviet SS-20 deployment. Unquestionably, strong motivations in the European TVD underlie the continuing Soviet need for long-range theater nuclear forces. The most important are the following:

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[18]John Baker et al., "Soviet Perceptions of U.S. Nuclear Development and Deployment," PSR Technical Note No. 562, August 1983, p. 25.

- Military requirements in the Western Europe TVD were, and are still today, equally important to those in the transoceanic TVD. Simply put, from the late 1950s to the present, robust nuclear and conventional capabilities have faced Soviet military planners along the USSR's geographic periphery, especially in Western Europe.
- The paramount theme in Soviet military strategy at the origin of the massive theaterwide attack option was the necessity to attack priority targets to the strategic rear of the TVD. Aside from changes in notions of escalation, the deep-attack theme remains a principal feature of contemporary Soviet strategy.
- A prime design criterion in Soviet ballistic missile development has been "range to target." It was decidedly less costly for the Soviets to threaten deep targets in the Western TVD with medium- and intermediate-range missiles and bombers than exclusively with intercontinental-range systems.
- Deciding on the specific number of long-range theater nuclear systems arose primarily from warfighting, rather than just political or deterrent considerations. Therefore, understanding these warfighting considerations provides important insights into essential Soviet theater nuclear requirements, particularly in the framework of the unique targeting demands of each individual TVD.

THE BREZHNEV YEARS: THE SEARCH FOR NEW MILITARY OPTIONS

The genesis of the second contingency (an escalating conflict) that shapes Soviet military requirements grew out of the post-Khrushchev reaction of the Soviet military to an overreliance on nuclear weapons. The constituents of this reaction and consequent search for new options consisted of three elements: the reemergence of the military as the dominant force in the development of military science; the implications of the Soviet achievement of strategic nuclear parity with the United States, which hastened the search for new forms and methods of combat; and recognition that NATO had eschewed sole reliance on massive retaliation and sought more flexible forms of response.

The Soviet armed forces, especially the ground, air, and surface naval forces, exploited a more pliable political leadership to resurrect those traditional Soviet military themes (especially the combined-arms approach to warfare) more conducive to a balanced force development

process. Indeed, the Soviet military began to reevaluate the course of military development immediately after Khrushchev's ouster.[19]

Soviet achievement of strategic nuclear parity with the United States strongly conditioned cracks in the monolith of the single-variant notion of warfare. Although the signing of SALT I in 1972 represented formal recognition of this new strategic reality, by 1965 Soviet military authorities could foresee that parity would probably change the "objective conditions" affecting the outbreak of war. In other words, a future world war might start with massive exchanges of nuclear weapons, but emerging Soviet retaliatory forces altered U.S. calculations of such a strike's effectiveness; consequently the West would be compelled to seek alternative methods and forms for starting and conducting future wars. Out of this dilemma, Soviet military planners saw the United States forge the doctrine of flexible response, which "combined the most varied methods and means of waging armed conflicts, with and without nuclear weapons."[20]

By late 1968, several authoritative Soviet military figures had acknowledged the USSR's intent to base planning requirements on a more flexible view of potential conflict contingencies. Perhaps the most prominent example is an article published in the restricted journal of the General Staff by V. D. Sokolovskiy, former chief of the Soviet General Staff and editor of *Military Strategy*, and Major General M. Cherednichenko. In it, the authors reached the following conclusion.

> The possibility is not excluded of wars occurring with the use of conventional weapons, as well as the limited use of nuclear means in one of several theaters of military operations, or of a relatively protracted nuclear war with the use of capabilities of all types of armed forces.[21]

This admission covers each of the three contingencies under discussion but lacks the rich detail needed to shed light on such issues as the prospects for a conventional war or limited use of nuclear weapons occurring in the Western TVD. Nonetheless, this statement and others implied the need to prepare Soviet shorter range forces for possible

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[19]S. A. Tyushkevich, *The Soviet Armed Forces: The History of Their Development*, Voyenizdat, Moscow, 1978, p. 476.

[20]A. Kvitnitskikiy and Yu. Nepodayev, "The Theory of the Escalation of War," *Voyennaya mysl'*, No. 9, September 1965, trans. FBIS FDD 952, 2 March 1966, p. 14. For a Western view of Soviet perceptions of escalation, see Dennis M. Gormley and Douglas M. Hart, "Soviet Views on Escalation: Implications for Alliance Strategy," *The EAI Papers*, No. 8, European-American Institute for Security Research, Marina del Rey, CA, Summer 1984.

[21]V. D. Sokolovskiy and M. Cherednichenko, "Military Strategy and Its Problems," *Voyennaya mysl'*, No. 10, October 1968, p. 156.

"tactical nuclear wars" preceding escalation to theaterwide and general nuclear war.[22] Only with the passage of time and with the creation of the necessary military instruments would Soviet planners gain sufficient confidence to clarify these matters. By the end of the decade, however, the Soviets had charted a clear course foreshadowing (indeed, stimulating) the large-scale conventional and nuclear buildup of the 1970s. That course had few inherent limitations with respect to procurement guidance, given the reality that there was now

> too great a risk on the destruction of one's own government and the responsibility to humanity for the fatal consequences of the nuclear war is too heavy— make an easy decision on the immediate employment of nuclear weapons from the very beginning of a war *without having used all other means for the attainment of its objectives.*[23] (Emphasis added.)

Having formally achieved strategic parity with the United States, the Soviets began to explore the notion of a threshold between intercontinental and theater nuclear war. A blatant Soviet attempt to render extended deterrence meaningless occurred during the U.S.-Soviet negotiations in 1972 on the Prevention of Nuclear War. Henry Kissinger has reported that the Soviets described certain acceptable conditions for nuclear weapon use as including confinement to the territory of allies.[24]

During the 1960s, it was standard Soviet practice to assert that the U.S. homeland would be inescapably drawn into a rapidly escalating nuclear war. By the mid-1970s, authoritative Soviet sources were writing about the great potential (clearly, a change from the inevitability of the previous decade) for a war to escalate to the level of nuclear strikes against the U.S. homeland. Although escalation to the intercontinental level became less than automatic in the 1970s (but still fraught with great danger of evolving into an all-out war), the Soviets to this day declare that escalation within the European theater (and probably any theater of military operations) is inevitable once nuclear weapons are used.

Soviet politica' and military authorities reacted strongly to U.S. attempts during the 1970s to recouple strategic forces with European security. Recoupling was manifested in the Schlesinger Doctrine

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[22]N. A. Lomov, "The Influence of Soviet Military Doctrine on the Development of Military Art," *Kommunist voorizhennykh sil*, November 1965, pp. 16–18.

[23]General S. Ivanov, "Soviet Military Doctrine and Strategy," *Voyennaya mysl'*, No. 5, May 1969, trans. FBIS FPD 0117/69, 18 December 1969, as cited in *Selected Readings from Soviet Military Thought 1959-1973*, SPC Report 584, Systems Planning Corp., Arlington, VA, 1980, p. 48.

[24]Henry A. Kissinger, *Years of Upheaval*, Little, Brown and Co., Boston, 1982, p. 277.

(promulgated by National Security Decision Memorandum 242), Presidential Decision 59, and the Alliance's Long Range Theater Nuclear Force decision; in each case the Soviets denigrated the U.S. attempt to establish its own "rules of the game."

Parity eventually wrought major changes in Soviet pronouncements on the utility of nuclear weapons. In a speech delivered at Tula in January 1977, President Brezhnev renounced strategic superiority as a Soviet goal. It appeared that, barring a major breakthrough in strategic defensive technology, the Soviets were prepared to limit strategic competition to the maintenance of parity. Victory in the context of a global nuclear war was seen as an increasingly problematic concept; and strategic parity did not in principle negate escalation dominance at lower levels of conflict. The 1970s ended with Soviet declaratory policy alluding again to the inevitability of escalation to homeland exchanges, should any nuclear weapons be used.[25]

The achievement of strategic parity embodied more than just attaining equal numbers of strategic systems. The decade of the 1970s also brought expanded missions for Soviet strategic nuclear forces. In the 1960s, all three legs of the Soviet triad were to be employed in the initial phase of the war, and the SRF was clearly viewed as the most important component of the intercontinental strike package. During the 1970s, however, the Soviet Navy substantially augmented the SRF. This development apparently occurred along the lines of counterforce and countervalue targeting. The Navy became a full-fledged member of the Soviet strategic forces by virtue of the survivability of its missile firing submarines (SSBNs), which were evidently viewed, beginning in the 1970s, as a secure (countervalue) reserve force. The SRF also improved the survivability of its systems during this period with an extensive silo hardening program. In the mid-1970s significant counterforce capability emerged with the deployment of the fourth generation of ICBMs equipped with multiple independently targetable reentry vehicles (MIRVs).

Force Requirements and Planning for an Escalation Contingency

Soviet design and procurement of sufficient numbers of nuclear systems merely to satisfy the needs of the massive-use contingency was unquestionably less exacting than the need to fulfill the requirements of the escalating contingency. Moreover, an escalating contingency

[25]James McConnell, "The Interacting Evolution of Soviet and American Military Doctrines," Center for Naval Analysis Memorandum No. 80-1313.00, September 17, 1980, pp. 69-72.

introduced complex uncertainties into the force planning process. Planning for the massive-use contingency could be carried out in peacetime. It consisted of a fairly straightforward application of nuclear forces against a largely fixed target set. To that extent, Soviet force-sizing analysis was also comparatively simple: Given a known number of high-priority targets combined with damage expectancy requirements, Soviet military planners could easily stipulate nuclear force requirements and provide for the deconfliction of strategic and operational strikes based primarily on the range capabilities of strike assets. But an escalating contingency, and the acceptance of an uncertain phase of conventional operations followed perhaps by nuclear strikes limited to a *front's* nuclear forces, presented enormously complex problems for force sizing and planning.

Soviet planners were not sanguine about dominating the escalation process and avoiding the expansion of a European conflict into general nuclear war. The difficulty of predicting precisely when a conflict would escalate to nuclear operations confronted Soviet planners with a taxing dilemma: not abandoning a conventional advantage too soon and not exercising a nuclear option too late. By the late 1960s, Soviet planners foresaw the conventional phase of a major European campaign lasting no more than four or five days.[26] During this phase, the Soviets placed highest priority on destroying NATO's theater nuclear weapons by conventional means. But success in this endeavor was highly uncertain, given the difficulty of locating large numbers of mobile nuclear launchers. An even more complex task involved preparing Soviet forces to make a smooth transition from conventional to nuclear operations. The Soviet military saw a decisive advantage accruing to the side that successfully preempted the other's effective use of nuclear weapons. Preemption hinged critically on at least interdependent conditions: (1) detecting the enemy's preparations to use nuclear weapons; (2) locating enemy nuclear forces; and (3) having an adequate number of one's own nuclear weapons in constant readiness to respond.

The dilemma of not abandoning a conventional advantage too soon while not exercising a nuclear strike too late is perhaps most manifest in the requirement to detect the enemy's intention to use nuclear weapons. Unfortunately, Soviet military literature has not divulged precisely what conditions must prevail in the enemy's force posture to convince the Soviet political leadership of the urgency to preempt the enemy's first-use plans. But given the Soviet Union's heavy

[26]B. Samorukov, "Combat Operations Involving Conventional Means of Destruction," *Voyennaya mysl'*, No. 8, August 1967, Trans. FBIS FPD 0125/68, 26 August 1968, as cited in *Selected Readings*, p. 263.

investment in electronic reconnaissance means, together with the expected "noise" associated with NATO's decision to escalate, it appears safe to assume that the Soviets would attempt to base their preemptive actions on fairly precise information.[27] Such precision would help reduce the chances of a premature abandonment of successful conventional operations; it would also lower the probability of inadvertent Soviet escalation based on such preliminary (but, from NATO's standpoint, precautionary) steps as dispersal of nuclear weapons. The only suggestion implying a Soviet intention to preempt based on indirect evidence consists of analyses reported in the military literature of situations that could induce NATO to use nuclear weapons. These situations have included disruption of NATO's strategic command and control, loss of a certain percentage of NATO conventional forces, and the loss of NATO territory.[28] But these examples may only represent an effort to sensitize Soviet planners to the circumstances that would create strong escalatory incentives rather than to define a precise set of threshold conditions that would persuade Soviet political authorities to use nuclear weapons.

The second condition upon which effective preemption depends is target acquisition. The Soviets conceived the massive-attack contingency when NATO's nuclear capability was largely confined to airfields. The advent of mobility, coincident with the Soviet acceptance of an escalatory contingency, presented Soviet planners with enormous difficulties. No longer could they depend on using surprise to lull NATO into not dispersing its nuclear weapons for as long as possible. In a contingency in which massive strikes of long-range nuclear weapons occur from the very start of conflict, surprise could produce devastating results. But in a contingency in which several days of conventional fighting precede nuclear escalation, Soviet planners could not be certain that massive conventional air strikes would have a considerable success. Moreover, the complexity of the target-location problem was further compounded by the need to combine highly perishable targeting information with the proper mix of fully prepared nuclear strike systems, all within the narrow warning window provided by Soviet intelligence.

It is in the third condition of effective preemption (readiness to conduct a nuclear strike) that Soviet planners especially fell short in the late 1960s, particularly with respect to theater forces. Readiness to conduct a preemptive nuclear strike was measured in two ways: first,

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[27]Or the plethora of messages filling NATO communications nets requesting release of nuclear weapons.

[28]See, for example, Yu. Nepodayev, "On the 'Nuclear Threshold' in NATO Strategy," *Voyennaya mysl'*, No. 6, June 1966, trans. CIA FPIR 0503/67, 26 May 1967, pp. 70–79.

readiness to make a rapid transition from conventional to nuclear combat; and second, possession of sufficient quantities of ready nuclear weapons to meet mission needs.[29]

The readiness problem was more complex than simply coping with the slow reaction of nuclear forces. In fact, the conventional phase of operations afforded nuclear forces adequate time to reach an advanced readiness state, if such a condition had not already been attained before the onset of hostilities. More important was the need to switch rapidly from conventional to nuclear combat. In this regard, the Soviet military planned, in effect, an operational *coup de théatre*. Soviet tactical rockets (Frog) and operational-tactical missiles (Scud and Scaleboard) were only nominally dual-capable; system accuracies did not justify expending costly missiles on ineffective conventional strikes. Soviet planners turned this weakness into a strength by keeping short-range missiles and rockets passive (and thus more survivable) during conventional hostilities; further, nuclear warheads could be mated to missiles to permit a rapid transition to nuclear combat once the decision was made to preempt. But the same could not be said for a *front* commander's aircraft. Here Soviet planners fully intended to employ aircraft during the conventional phase of operations. By doing so, however, they might not have sufficient aircraft ready to meet the needs of preemption, and earmarking a certain percentage of dual-capable aircraft for a nuclear withhold only reduced Soviet air resources for the conventional campaign.[30]

Accepting a conventional phase of operations also allowed anticipating an uncertain loss of missile and rocket launchers and aircraft before the transition to nuclear combat. Restricted Soviet military writings similarly drew attention to the overcommitted nature of missile and rocket operations. Soviet planners discussed strategies for distributing scarce missile resources to a diverse target set. Such topics as whether to withhold a portion of the missile and rocket forces for known but unlocated priority targets (enemy nuclear missile launchers) or to employ available assets to destroy enemy maneuver units illustrate the dilemmas that underscored the need for short-range force expansion.[31] By 1970, improvements in quality and quantity of shorter range systems were clearly mandated, especially if Soviet military

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[29]See, for example, Samorukov, 1967.

[30]The existence of a nuclear withhold for frontal aviation is ascribed to N. Semenov, "Gaining Supremacy in the Air," *Voyennaya mysl'*, No. 4, April 1968, trans. FBIS FPD 0052/69, 27 May 1969, p. 44.

[31]This example is taken from D. Samorukov and L. Semeyko, "The Increase in Efforts in Nuclear Warfare Operations," *Voyennaya mysl'*, No. 10, October 1968, trans. FBIS FPD 0084/69, 4 September 1969, p. 48.

planners were to be the least bit sanguine about conducting effective preemptive strikes with front nuclear forces *before* proceeding to theaterwide and general nuclear conflict.

Growth in Theater Forces

Limitations in frontal nuclear forces were tolerable under a contingency that foresaw operational-tactical nuclear systems as merely a follow-up force to SRF and LRA medium- and intermediate-range nuclear forces. Indeed, severe limits in frontal nuclear forces compelled Soviet planners throughout the 1960s to depend heavily on SRF support to front targeting chores.[32] But an escalating contingency meant an expanded role and therefore expansion in the front commander's organic nuclear assets. Without dramatic improvements in conventional preemptive capabilities, Soviet military authorities would never have enough confidence that they could prevent NATO's use of nuclear weapons. While major investments in Soviet strategic forces challenged the credibility of U.S. strategic first-use, improvements in theater nuclear forces were required to render self-defeating any NATO resort to tactical nuclear use.

The Soviet force development process was already improving military instruments by the mid-1960s; the Scud-B demonstrated an 87 percent increase in range over its predecessor, and the Frog-7 showed a 40 percent range increase. Additionally, by the late 1960s or early 1970s, rocket and missile units began to augment their force structure; Frog battalions expanded from three to four launchers per battalion, while Scud brigades added a launcher to each of its three battalions, thus increasing the brigade from nine to 12 launchers.[33] But the most substantial improvement in front-organic nuclear delivery came in tactical aviation. What had been in the 1960s a force limited in both numbers and range became in the 1970s a force of considerable means. From 1965 to 1977, the offensive load capacity of Soviet frontal aviation in Eastern Europe grew by 90 percent.[34]

Although the requirements of the massive-use contingency had provided woefully little support for nuclear artillery, Soviet interest in

[32]See, for example, Joseph Douglass, *The Soviet Theater Nuclear Offensive*, prepared for the Office of DDR&E (Net Assessment) and Defense Nuclear Agency, published under the auspices of the United States Air Force, Washington, D.C., 1976, pp. 73–74.

[33]Donald R. Cotter, James H. Hansen, and Kirk McConnell, "The Nuclear 'Balance' in Europe: Status, Trends, Implications," *USSI Report*, 83-1, United States Strategic Institute, Washington, D.C., 1983, pp. 41–45; FM 100-2-3, Soviet Army Troops Organization and Equipment, Coordinating Draft, August 1982, pp. 4-88 and 4-164.

[34]Robert P. Berman, *Soviet Air Power in Transition*, The Brookings Institution, Washington, D.C., 1978, p. 54.

option enhancement and the escalatory contingency led to the reappearance of nuclear artillery after a hiatus of about ten years. By the late 1970s, Soviet ground forces had reportedly deployed some 300 towed 203-mm guns and 240-mm mortars, organized as heavy artillery brigades and earmarked to deliver nuclear artillery rounds in a 30-kilometer range.[35]

At the operational-strategic level, the SS-20's predecessors (SS-4, SS-5, and peripherally targeted SS-11) quite handily met Soviet-imposed damage criteria for the several hundred soft, fixed targets Soviet planners have worried most about. Relying on large, cumbersome, unstorable liquid-fuel missiles, which reportedly took eight hours to prepare for firing and could be held in that state for only five hours, the SS-4/5 missile force was simply insufficiently survivable and sustainable to meet the needs of any contingency, save for massive theaterwide use at the outset of hostilities. Soviet planning interest in the escalating contingency during the mid-1960s must surely have influenced the selection of the more costly mobile basing mode over placement of SS-20 missiles in silos; more recent interest in conventional-only contingencies simply reinforces the need for a secure and enduring theater-strategic nuclear reserve.

The Role of Theater Forces in an Escalating Contingency

In the mid-1970s the Soviet's goal appeared to be the attaining of a diverse set of military options (backed up by qualitatively and quantitatively improved military forces) designed to dominate each level of escalation from conventional, to operational-tactical nuclear, to general nuclear war. Success of this optimistic goal would carry enormous coercive value in peacetime. Should war occur, however, the Soviets intended to prevail at the lowest level of conflict by dominating the escalation process, thereby diminishing the risk of nuclear strikes on Soviet soil. As early as 1973, *Military Thought* reflected the assumption that the Soviets could prevail at the level of operational-tactical nuclear warfare.[36] In about a decade, the Soviet inventory of operational-tactical nuclear delivery systems (Frogs, Scuds, dual-capable aircraft, and nuclear artillery) doubled in size and represented roughly a two and one-half to one advantage over equivalent NATO systems by the mid-1970s.[37]

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[35]Hart and Gormley, 1983, p. 32.

[36]M. I. Cherednichenko, "Military Strategy and Military Technology," *Voyennaya mysl'*, No. 4, April 1973, trans. FBIS FPD 0043/73, 12 November 1973, p. 53.

[37]J. J. Martin, "How the Soviet Union Came to Gain Escalation Dominance—Trends and Asymmetries in the Theater Nuclear Balance," in Uwe Nerlich (ed.), *The Soviet*

Soviet planners in the mid-1970s expected that war with NATO would probably begin with conventional weapons and then escalate to the limited employment of nuclear weapons initiated by NATO to forestall the collapse of its defenses. According to lecture materials from the Voroshilov General Staff Academy, Soviet planners would try to preempt NATO's limited use of nuclear weapons with strikes by "operational and tactical nuclear delivery means" before escalation to Soviet homeland-based theater-strategic nuclear forces.[38]

Apparently, the output side of the Soviet force deployment process (more operational-tactical systems with greater range), together with NATO's expressions of interest in more graduated strategies of warfare, raised Soviet confidence in the prospects of prevailing under such limited conflict conditions. Achieving decisive results against the NATO's highest priority targets would guide Soviet planners in sizing attack options. No evidence suggests the Soviet use of limited nuclear attacks as devices for intrawar bargaining.

Despite applying the tag "limited" to operational-tactical nuclear preemption, such an attack could be quite large, depending primarily on when it occurred after the commencement of hostilities. In shaping baseline requirements for operational-tactical nuclear forces, Soviet planners would, of course, be driven by worst-case assumptions. For example, escalation to operational-tactical nuclear preemption could develop shortly after hostilities began; under such conditions, nearly all the enemy's high-priority targets would need to be struck. The extent to which NATO responds to warning through dispersal and reinforcement largely dictates the size of the target set. A longer conventional phase, during which Warsaw Pact forces would target NATO nuclear systems and other priority targets, might reduce the size of operational-tactical preemption considerably. The uncertain length of conventional operations, the relative success of NATO's efforts, if any, to attack Warsaw Pact nuclear forces, and the operational condition of friendly nuclear forces make sizing such attacks chancy. The Soviet notion of limitations entailed countermilitary strikes (as distinct from strikes against military industry and political-administrative centers) conducted initially by the nuclear forces organic to Warsaw Pact fronts, armies, and divisions in one or several TVDs, rather than by the aggregate of operational-tactical *and* theater-strategic nuclear forces as under the massive-use contingency.

Asset, Military Power in the Competition over Europe, Ballinger, Cambridge, 1983, pp. 110–111, 114–115.

[38]As cited in Trulock, 1984, p. 72.

THE 1980s AND BEYOND: CONVENTIONAL SOLUTIONS FOR NUCLEAR PROBLEMS

The third contingency (conventional-only) culminated an evolutionary process that began in the mid-1960s with the Soviet search for operational flexibility. Soviet military planners initially saw the conventional phase of a major war as brief, lasting a few days at best, during which time preparation for operational-tactical, then strategic nuclear phases would occur. By the mid-1970s, however, they saw the conventional stage expanded to a strategic operation (an ascription previously reserved for nuclear-related operations) lasting up to 30 days.[39] By 1982, Soviet military writers were discussing entire wars between major coalitions conducted without nuclear weapons.[40] In the important 1982 book *Military-Technical Process and the Armed Forces of the USSR*, Major General M. M. Kir'yan expressed confidence that the Soviet armed forces had perfected appropriate methods and a force structure capable of conducting warfare "both with the use of nuclear weapons and with the use only of conventional means."[41] Further on Kir'yan depicts the West's "theory of war's escalation" and the implications it holds for shaping Soviet military requirements as including the

> unleashing and for some time waging [of war] using only conventional means and then shifting at a certain point to the use of nuclear weapons, first with tactical and later on with possibly even more powerful weapons. Use of only conventional weapons has not been excluded in waging armed conflict. Under these conditions Soviet military thought developed the means to wage military operations with and without the use of nuclear weapons.[42]

The above description makes clear the continuing Soviet need for nuclear options at the tactical, theater, and strategic levels. Indeed, the Soviet notions of conventional strategic operations and entire wars fought only with conventional weapons were developed in the context of constraints imposed on all combatants by rough nuclear parity. Nonetheless, the efficacy of plausible nuclear options for Soviet planners lies in the coercive power these options hold in peacetime and the intrawar deterrent leverage they provide should war occur. And despite the Soviet unilateral declaration of no first use of nuclear weapons, the need to maintain the capability to conduct operational-

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[39]McConnell, 1980, pp. 96–97.

[40]Kir'yan, 1982, pp. 312–313.

[41]Ibid., p. 312.

[42]Ibid., p. 313.

tactical and strategic nuclear preemption remains an unremitting requirement for Soviet nuclear forces. The Soviet

> contemporary concept of non-nuclear war envisions the combination of the achievement of strategic results by conventional weapons with the readiness to repel nuclear attacks.[43]

Optimism in Soviet military commentaries of the early 1980s was no doubt based on a combination of politico-military factors. Politically, Soviet foreign policy successes during the 1970s were in no small measure seen as the product of the restraining influence of strategic parity on U.S. influence around the globe. Militarily, emerging conventional technologies—longer range, highly accurate, dual-capable delivery systems in particular—began to foreshadow the capacity to furnish conventional solutions for nuclear problems. Preventing NATO from employing nuclear weapons, the threat of which constitutes the heart of NATO's deterrent strategy, formed the crux of the Soviet's problem. The solution to this operational conundrum lies in the Soviet force development process. The deployment of enough new weapons in the 1960s enabled Soviet military theoreticians to perfect new forms and methods of combat operations, giving hope that a war could be conducted by stages; a new phase in the dialectical process of force development now offered the prospect of conducting decisive missions (such as preventing NATO's nuclear riposte) without using nuclear weapons. Then Minister of Defense A. A. Grechko reflected on the process in his 1975 book when he suggested that

> due to a qualitative improvement in conventional means of destruction and *the increase in units and formations*, there has been a great improvement in the fire, shock and maneuver capabilities of troops, which permits assigning them very decisive missions on the battlefield which they are capable of accomplishing without resorting to nuclear weapons.[44] (Emphasis added.)

Yet, the quality and quantity of new conventional weapons represent necessary, if insufficient, conditions to bring the latest phase in the force development process full cycle. At least two additional conditions seemed in order: the necessity, first, to modify and improve operational concepts of war that would materially capitalize on the availability of new and better conventional weapons and, second, to reshape the Soviet armed forces to enable them to execute these newly accommodated operational concepts.

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[43]CPT 1st Rank L. Ol'Shtynskiy, *Cooperation of the Army and Navy*, Voyenizdat, Moscow, 1983, p. 132.

[44]A. A. Grechko, *The Armed Forces of the Soviet State*, Voyenizdat, Moscow, 1975, trans. U.S. Air Force, Soviet Military Thought series, No. 12, Washington, D.C., no date, pp. 147–148.

To that end, the Soviet military instituted the following operational and organizational changes in the mid to late 1970s:

- Soviet planners reorganized the air force and air defense force to provide greater flexibility in employing long-range strike aircraft, organic close-air support, and air defense of the ground forces. Consistent with these changes, they refined the air operation, which, in effect, substitutes for an initial mass nuclear strike against high-value military targets throughout the depth of NATO's defense.
- They revised the World War II "mobile group" concept in the guise of operational maneuver groups (OMG). Broadly speaking, the function of the OMG is to penetrate NATO lines rapidly and cause paralysis and eventually complete collapse before NATO can use nuclear weapons.
- They streamlined logistics command and control and prestocked large quantities of ammunition (60–90 days), fuel (90 days), and other war supplies in forward areas. In the past, NATO could count on detecting an impending offensive by monitoring the movement of supplies from rear-area dumps to forward positions. Such an expectation is no longer the case.
- Major improvements in the mobility and firepower of Soviet air-borne divisions coupled with helicopter-borne air-assault brigades suggested a highly coordinated approach to deep-penetration attacks against NATO high-value targets.
- Now that front commanders possessed weapons with ranges capable of influence well beyond a front's area of interest, the general staff saw the need to coordinate the activities of several fronts. To that end, Soviet planners reestablished the concept of the High Command in the TVD, which is designed to control the complex timing and execution of multifront air, missile, air-borne, and ground activity of a conventional strategic offensive in a continental TVD. This command and control feature, together with the restructuring of air and air defense forces, places Soviet and Warsaw Pact forces in a more streamlined posture to respond to modern war conditions. Principally, those conditions dictate surprise and preemptive action.

The operational objectives of the conventional-only contingency are simple to conceive but complex to execute. The massive nuclear and escalating contingencies held a straightforward solution to the problem of disrupting NATO's nuclear weapons, air forces, and command and

control centers: massive missile- and air-delivered nuclear weapons employed preemptively at the start of war, or soon after. A conventional solution would require a qualitatively new role for operational-tactical delivery systems (especially missiles) if Soviet planners were to be confident in the success of the conventional-only contingency.

Soviet strategy for a conventional strategic operation in the Western TVD envisions a decisive conventional operations period to cause a rapid collapse of NATO defenses, especially NATO's ability to escalate to the nuclear level. How much of NATO's nuclear capability must be disrupted to achieve disintegration of NATO's political will is of course unknowable; presumably the higher the percentage the lower the incentive for NATO leaders to escalate. Soviet expectations of executing such a bold strategy hinge on use of a formula that not only exploits the technical virtues of improved mobility, firepower, and weapon accuracy but also denies NATO the ability to capitalize on its own improved military capabilities.

The Soviet operational concept entails employment of division- and perhaps army-size OMGs to prevent NATO from organizing a coherent in-depth defense. Emphasizing surprise and high-speed advances, OMGs would attempt to penetrate deep into NATO's rear to disrupt or destroy nuclear weapons, aircraft, logistic support, command and control centers, and reserve and withdrawal forces. Success would depend on important variables, the most critical of which is winning the counterair campaign. The effective commitment of OMGs early in a theaterwide campaign presupposes a successful air operation against NATO to reduce the chance of air attacks on OMGs before, during, and after their insertion. Soviet planners view NATO's air assets as having the requisite speed and firepower to react decisively to OMG penetrations. Equally important, the air operation would be expected to disrupt NATO's air defense network to enable friendly fighter-bombers, helicopters, and transport aircraft to accompany or follow up OMG penetrations. Airborne and helicopter assaults simply cannot be executed until the air battle is won.

Many Western analysts are skeptical about Soviet capabilities to execute such an audacious strategy. They question whether the Warsaw Pact could achieve the kind of air superiority needed to enable deep raids behind NATO's forward lines and whether a Soviet junior officer corps practiced in conformity to predetermined war plans possesses the initiative and flexibility to react decisively under such complex battle conditions. However legitimate, these questions focus on the kind of contingency the Soviet Union would least like to be involved in: one in which NATO has had sufficient time to mobilize its superior military potential.

Conservative Soviet planners share the skeptics' doubts over Warsaw Pact prospects under Western-preferred conditions. Despite recent improvements in long-war preparations (such as logistics stockpiling), Soviet military authorities are sensitive to several prominent Warsaw Pact weaknesses, among them the questionable reliability of the USSR's allies, command and control inflexibility under rapidly changing circumstances, and shortcomings in theater reconnaissance capabilities. Such a combination of shortcomings would probably render any Soviet prospects for a sustained offensive against a prepared NATO problematic. Perhaps the best way for Soviet planners to reconcile Warsaw Pact weaknesses is through achieving decisive results preemptively in the first campaign of a future war, before events become uncontrollable. A possible solution lies in exploiting the "initial period of war" when the number of installations (targets) that must be attacked to achieve decisive results is small compared with the targeting requirements of the post-mobilization period. In his 1974 book, *Initial Period of War*, General S. P. Ivanov emphasizes the role of surprise

> to inflict a decisive defeat on the enemy's first strategic echelon; and then, by continuing with a speedy offensive into the depths of his territory, to complete his total defeat before he was able to mobilize and make use of his military and economic potential.[45]

A short, decisive campaign also helps to compensate for shortcomings in the flexibility of the officer corps' lower ranks (through intensive preplanning) and the uncertain reliability of the Soviet Union's Warsaw Pact allies (as a short war reduces their opportunities to opt out).

What are the constituents of this decisive, preemptive attack during the initial period of war? In the late 1970s, Western analysts accorded much attention to the role of Soviet Frontal Aviation in conducting a massive conventional air operation against NATO's nuclear forces, command posts, and airfields at the beginning of hostilities. To be sure, the 1970s brought dramatic improvements to Frontal Aviation's assets: nearly a doubling in offensive load capacity and 70 percent more versatility in comparison with the predecessor generation of aircraft. By 1978, the Central Intelligence Agency estimated that Frontal Aviation's share of Soviet defense spending was about twice that of the Strategic Rocket Forces, a figure aptly reflecting the increased burden

[45]S. P. Ivanov, *Initial Period of War*, Voenizdat, Moscow, 1974, as cited in P. H. Vigor, *Soviet Blitzkrieg Theory*, St. Martin's Press, New York, 1983, p. viii. For a more recent treatment of the initial period see General-Lieutenant A. I. Evseev, "On Certain Trends in Changes in the Content and Nature of the Initial Period of War," *Voenno istoricheskiy zhurnal*, November 1985.

assumed by the operational front commander for furnishing preemptive shock power at the commencement of hostilities.

But it is shortsighted to view Frontal Aviation as the linchpin of the Soviet conventional-only contingency. Although the air operation does substitute for the initial mass nuclear strike of the massive nuclear and escalatory contingencies, its constituents are far more varied and complex than is implied by its name. Indeed, before Frontal Aviation's attack through selected NATO air defense sectors to open up several penetration corridors, tactical and operational-tactical missile forces would attack NATO's air defenses and other high-priority NATO targets with improved conventional munitions, while electronic warfare aircraft would disrupt NATO air defense radar and communications network. After Frontal Aviation's attack to open penetration corridors, longer range aircraft of the Supreme High Command (including SU-24 Fencers and TU-26 Backfires, for example) would attack critical NATO targets to the depth of the theater. This panoply of missile and air activity would precede and thereby enable, by virtue of achieving air superiority, the initiation of warfare on the ground by an equally varied mix of airborne, air assault, and OMG formations. If any part of the air operation force merits the epithet "linchpin," it belongs to the emerging force of highly accurate tactical and operational-tactical ballistic missiles now being deployed in increasing numbers with Soviet ground-force units in Eastern Europe.[46]

While Western analysts emphasize the offensive character of the strategic operation in the TVD, a substantial defensive component exists to blunt the effectiveness of NATO retaliatory responses that are unaffected by the air operation. Most are well acquainted with the major Soviet investment in overlapping air defenses against NATO aerodynamic threats. A new defensive dimension is the SA-X-12, which is reportedly capable of operating against both aircraft and shorter range ballistic missiles (Lance, Pershing IA, and Pershing II). Deployed around Warsaw Pact airfields, command and control bunkers, and other high-value facilities, a Soviet anti-tactical ballistic missile system—operating in tandem with new Soviet short-range missiles—could seriously challenge NATO's ability to threaten escalation.

ON BALANCE

In reviewing the last 35 years of Soviet military developments, one is struck by the consistent, even-handed Soviet approach to assessing

[46]For a detailed examination, see Dennis M. Gormley, "A New Dimension to Soviet Theater Strategy," *ORBIS*, Fall 1985, pp. 537-569.

threats inherent in Western strategy and to establishing requirements for military procurement. This stands in contrast to the history of abrupt swings in national security planning in the West, where decisions about the size of defense budgets are less realistically adapted to fundamental national security goals and plans.

There are two critical dimensions (or measures of effectiveness, if you will) to the output side of the Soviet force development process. One is geopolitical, the other geostrategic. Geopolitically, the force development process furnished the Soviet leadership with enough military force practically and formally to be declared an equal to the United States at the level of strategic nuclear forces. Yet the achievement of strategic parity failed to deliver on the Soviet claim to global equality with the United States in political as well as military terms. The political return on the Soviet Union's huge investment in strategic and conventional forces was considerably below Moscow's expectations. Nevertheless, despite the Kremlin's difficulty in translating raw military capability into political influence, the restraining influence of parity at the geostrategic level permitted Soviet military planners to develop an array of military options suiting the needs of various military contingencies below the level of general nuclear war. Although it is debatable just how much leverage these options furnish the Soviet leadership in undermining political consensus within the Western alliance, these new military options present the West with formidable practical difficulties should there be a breakdown in deterrence.

FUTURE UNCERTAINTY

Despite the substantial accumulation of military power over the past 35 years, senior Soviet military officials have begun to doubt their ability to manage the future of military competition with the West. Soviet planners express concern about the long-range implications of new weapons technologies. The West's current fascination with such doctrines as AirLand Battle, Follow-on Forces Attack or Deep Attack, and counterair initiatives impress and worry Soviet planners. They respect these more offensively oriented strategies; in contrast to the seriousness with which AirLand Battle has been greeted, Soviet military specialists were virtually mute in their reaction to the U.S. Army's more defensively oriented "active defense" doctrine promulgated in the FM 100-5 of 1976. They are especially impressed with the potential of the West's emerging conventional technologies to achieve decisive results early in any military campaign. These near-term Western initiatives have reinforced longstanding Soviet offensive proclivities by compelling

Soviet planners to emphasize even more the critical need to achieve surprise and exploit the initial period of war.[47]

At the strategic level, Moscow sees important new challenges to her military gains in a number of U.S. initiatives. Offensive modernization programs (MX, Trident D-5) are viewed as yet another attempt by Washington to impose "unilateral deterrence" on the socialist community. Even more worrisome for the long-term competition is the U.S. Strategic Defense Initiative (SDI). SDI's technological challenge cannot simply be dealt with by increases in defense expenditures, which, in any event, are somewhat problematic at this writing. SDI, in fact, raises the more fundamental issue of whether the Soviet technological base is capable of keeping pace with Western military developments. The security implications, to be sure, are enormous.

Manifestations of Soviet military concern about the implications of Western initiatives were evident in the early 1980s. Marshall Ogarkov's views are generally well known in the West, but by no means is he the only senior military official expressing growing concern over the long-term military competition and the character of future wars.[48] Indeed, his replacement, Marshal Akhromeyev, has more delicately called attention to these issues by challenging Soviet military scientists to produce a "correct forecast of the development of the military-strategic situation and the methods of the conduct of war."[49] But perhaps the most explicit reflection of disquietude is found in the work of General-Colonel M. A. Gareyev (who is currently Deputy Chief of the General Staff), who generally asserts that the answers Soviet military science had fashioned in the late 1970s are relevant neither to contemporary nor future circumstances confronting the Soviet Union.[50]

Moscow's current predicaments pose both opportunities and dilemmas for the Western Alliance. Certainly, Moscow and Washington broadly share an interest in managing the strategic nuclear competition. Many argue that a basis now exists for strategic nuclear arms control: that is, U.S. willingness to halt or dramatically abate SDI

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[47]For an elaboration, see Dennis M. Gormley, "The Impact of NATO Doctrinal Changes on the Policies and Strategic Choices of Warsaw Pact States: Part II," in "Power and Policy: Doctrine, the Alliance and Arms Control," *Adelphi Papers*, No. 206, IISS, London, 1986, pp. 20–35.

[48]For an illustration of Ogarkov's concerns, see "Military Leader's Thought," *Krasnaya zvezda*, October 2, 1983, p. 3. I am indebted to my colleague, Notra Trulock III, for bringing this and other examples of this issue to my attention.

[49]Marshal S. Akhromeyev, "The Role of the Soviet Union and Its Armed Forces in the Achievement of a Sharp Turn in the Second World War and Its International Significance," *Voenno istoricheskiy zhurnal*, February 1985, p. 24.

[50]Colonel-General M. A. Gareyev, *The Views of M. V. Frunze and Contemporary Military Theory*, Voyenizdat, Moscow, 1985.

development in exchange for major reductions in strategic offensive arsenals. There are even greater prospects for progress in intermediate nuclear force negotiations. Yet what some view as hope others view as a dilemma. They see a Soviet Union grappling with systematic decline and desperately in need of restructuring a long-term political strategy of negotiations and détente with the West. Thus, Soviet interest in arms control is viewed as a means of broadly controlling technological competition with the West and specifically challenging any Western notion of extended deterrence. In this sense, arms control's double-edge quality once again confronts Western decisionmakers with hard choices about how to maintain a sound deterrent posture in a strategically stable context.

VII. SOVIET MILITARY ASSESSMENT OF AND COUNTERS TO WESTERN STRATEGY: A EUROPEAN VIEW

by Hartmut Pohlman

INTRODUCTION

If extended deterrence means the inclusion of Western Europe under the U.S. nuclear guarantee, then extended deterrence has existed since the foundation of the Alliance. This could suggest that most of the Soviet military developments concerning doctrine, strategy, armament programs, and operational thinking ever since have been a logical reaction to this very fact.[1]

Although there is little evidence that the Soviets consider their armed forces as a deterrent, there is little doubt that their military power has been conceived primarily in terms of deterring potential enemies from a position of strength and, if possible, superiority. This strength has been developed not only with regard to NATO's changing strategies but also with its military capabilities in mind. Although deterrence is the primary aim, decisive importance has been attached to warfighting capabilities.

One of the many controversial questions of the debate on Soviet reactions to extended deterrence refers to their view on mutual deterrence. The Soviet Union's profound security interests—their desire to maintain superpower status with regard to the United States, the conditions of a closed society, the interrelationship of Soviet ideological beliefs and political imperatives, the currently changing or at least ambiguous importance of military influence on Soviet policy in an environment of economic slowdown, energy shortages, and consumer pressure, just to name a few influential factors—tends to obscure our assessment of Soviet policy interests in deterrence and the strategic relationship with the United States of America, including arms limitation. I doubt whether the European view on the reasoning and motivations for the continuous Soviet military buildup is very different from the U.S. perspective, and I cannot present a totally new picture as we all share the same sources of military writings and intelligence.

[1]Besides the defense of the homeland against external threats, the Soviet military also plays a role in the pursuit of state policy, such as the preservation of interests outside the state territory and the furtherance of foreign policy; these issues are not covered here.

U.S. and European differences become more apparent in our reactions to Soviet policy. I shall present our (European?) view on the Soviet Union's perception of the threat and the changes in Soviet nuclear strategy and force posture in response to extended deterrence. Military actions and capabilities will be laid out first before I assess the broader category of Soviet political-military responses that derive from the XXVII Party Congress.

The reason to look at both capabilities and public statements is obvious: The Soviet military posture permits flexibility not correspondingly reflected in Soviet doctrine. It might well be that because of Soviet doctrinal uncertainty, doubts will be raised within NATO about the viability of its flexible response strategy and that NATO will be deterred in any crisis. We are left to speculate from numbers, equipment, weaponry, R&D, maneuvers, and Soviet military publications.

THE SOVIET THREAT ASSESSMENT

The Soviet Union feels globally isolated and surrounded by potential adversaries. The cohesion of the Western Alliance and its security policy are perceived as aggressive: The United States and its allies are allegedly warmongering states. The Western strategy of deterrence is not accepted as a peacekeeping strategy. NATO's doctrine of deterrence is instead intended to exert pressure and intimidation on the Soviet Union to deny her freedom of action.

The Soviet strategic argument is that the U.S deterrent puts the Soviet Union under the threat of a nuclear war. The fact that NATO maintains nuclear capabilities in the European theater coupled with the principle of nuclear escalation is the primary concern for the Soviet Union. The aggressiveness of such a strategy reflects an offensive policy and a dangerous military threat. NATO's viable options, based on its strategy of flexible response, place the Soviet military at a disadvantage. In particular, the U.S. capability to strike Soviet territory from Europe is of great importance for the Soviet Union as it cuts back her nuclear dominance in this region.

The motivation for Soviet propaganda against U.S. deterrent capabilities in general and the concept of an extended deterrence in particular is clearly understood in the light of the Soviet pledge for equal security. Western imperialism cannot be trusted, for the option to fight a war against the Soviet Union will remain. Therefore, a security policy that relies exclusively on the expectation that there will never be a war between East and West is not acceptable to the Soviet leadership.

It is considered a must that the Soviet Union has "enough" security in connection with possible developments and situations. If it came to a war against the West, the security of the homeland is of paramount importance. Therefore, the Soviet Union assesses extended deterrence as threatening to its security—since a conflict could be carried directly into the Soviet Union by nuclear means (LRINFs, forward based systems, and ICBMs), thus endangering the Soviet Union's existence. This concern is based on the belief that the Western Alliance, in particular the United States, would hope to keep a nuclear war against the Soviet Union limited to Europe; otherwise the nuclear threat against the Soviet Union from Western Europe would make no sense. Under the assumption that the Soviet Union would retaliate with nuclear strategic weapons against the United States, such an attack would be much more effective when carried out by U.S. intercontinental strategic systems. However, that would bring about the elimination of all countries in at least the northern hemisphere. This is why Soviet politicians since 1979 continue to emphasize that the U.S. leadership would want to strike the Soviet Union within the limited European theater.

The threat of a limited nuclear war in Europe initiated by the United States is voiced by the Soviet Union only when it is addressing the Western European public. Soviet publications argued that the threat of a limited nuclear war emanates from the United States because the United States wants to eliminate the Soviet Union as a political rival (short of an all-out strategic exchange) and open the way for global U.S. dominance. Since the NATO double-track decision, this Soviet view has been reinforced with the deployment of Pershing IIs and GLCMs in Western Europe.

When addressing North Americans, the Soviets change this thesis completely. There would be no discussion of limiting a nuclear war between both superpowers to Europe. Any U.S. nuclear attack on Soviet territory, whether from European or North American soil, would be answered by full-scale nuclear retaliation against U.S. territory.

THE SOVIET FORCE POSTURE IN RESPONSE TO EXTENDED DETERRENCE

Principles of and Developments in Soviet Operational Thinking

The first and foremost question concerns the role of nuclear weapons in planning and conducting military operations. In the first

half of the 1960s, Soviet military doctrine stated that any war waged in Europe against NATO would be a "nuclear missiles war." This was what the armed forces and operational planning of the Warsaw Pact countries had to make allowance for. It was concluded that any other military action would be governed by the use of nuclear weapons; their effects would have to be exploited. Consequently, the first two editions of Sokolovskij's *Military Strategy* use the term *modern war* as synonymous for nuclear war.

This absolute reliance on nuclear weapons came to an end with Khrushchev's downfall. Perhaps the most important change in the third edition of Sokolovskij's book, published in 1967, was the qualifying statement that concepts and principles described in the book were merely applicable to war also involving the use of nuclear missiles. This was one of the first indications that Soviet military doctrine contemplated, among other things, military operations without use of nuclear weapons. Afterward it became clear that this did not refer merely to local wars between or against countries that did not possess nuclear weapons.

The military doctrine obviously reflects the Soviet leaders' desire to preserve the freedom of decision to use or not to use nuclear weapons and, as a matter of principle, the requirement that the armed forces must be prepared to execute their missions without using such weapons as well. This requirement has stood without any change ever since.

Without neglecting nuclear weapon modernization, the Soviets and, to a somewhat lesser extent, their allies as well have developed the nonnuclear components of their forces in such a way that the use of nuclear weapons at present has lost the paramount decisiveness it had during the period of the late 1960s. This concept requires not only well-orchestrated and integrated operations of all arms and services, but also a flexible C^3 system supplementing the necessary planning in advance.

Let me briefly outline the main operational principles that according to my assessment continue to be valid today:

- First is the preparation of comprehensive plans—on the one hand detailed enough to ensure sufficient coordination of all actions, but on the other permitting the command authorities to respond to any conceivable development of the situation. Consequently, operational planning must be feasible on the basis of both the use and nonuse of nuclear weapons.
- The main effort should be where the enemy is weak, thus offering a good chance of success. Troops and material must be concentrated for such a main effort even at the expense of

other sectors, if necessary. However, the fluidity of the battle and the requirement to avoid vulnerable force concentrations do not allow the main direction of attack to be predetermined for the operation from start to finish. Therefore, thrusts will be made at as many points as possible in order to check the enemy's weak spots. More and more troops and firepower will be concentrated on those spots until the breakthrough is achieved. The breakthrough will then be exploited, regardless of open flanks and as fast as possible, deep into the enemy area to seize the intended operational objective. Retreating enemy forces will be effectively pursued. However, attention will not be diverted from the objective, making it possible not only to disrupt the enemy's defenses but also to facilitate the necessary dispersal of one's own troops because of the enemy's nuclear threat. The required fire support can be provided by mobile artillery, tactical and operational missiles, and air force. Success can be accelerated by airborne assaults.

- A third principle is the battlefield deployment of forces well echeloned in depth, thereby reducing their vulnerability. This will make it possible to shift the direction of the main effort even while the operation is under way. The principle of organizing forces in successive echelons, which are assigned specific missions in advance to be executed during the course of the operation, is complemented by the retention of operational reserves to be committed at the commander's discretion.

Consequences of Operational Doctrine for Force Developments

The Soviets will continue to develop the existing principle of a "deep, uninterrupted operation" leading to the strategic objectives (the Atlantic Coast). In the future we have to expect not a frontal operation (group of 3–5 armies) but the "strategic operation" of a group of fronts backed up by strategic air operations. Structural prerequisites for these type of operations can be observed.

Ground Forces

- Structural changes. The regimental level is now able to execute the combined arms combat: (a) motorized rifle troops able to accompany attacking main battle tanks in every phase of battle; (b) better equipped tanks (laser range finder, night vision devices, heavier guns, improved armor); (c) artillery (self-propelled guns with improved direct fire support capability); and combat and combat support forces.

- Introduction of the SS-21 and SS-23 (Division and Army level). Besides the nuclear threat, another conventional and chemical threat is evolving because these weapons are being equipped with modern warheads (precision guided munitions, submunitions, etc.) that have greatly increased accuracy (CEP 200–300m). Although these weapons might be disregarded in case of a zero-zero INF arms control agreement, the capacities have a growing importance in the European perspective.
- Massive deployment of attack helicopters. Their operational assignment provides division and army commanders with a weapon system that is especially well suited for heavy fire support for points of main effort.

Air Forces and Air Defense Forces

- The completed restructuring of the Soviet Air Force creates an excellent capability for an offensive instead of the existing defensive alignment (five air armies for strategic purposes, air forces for the fronts) and guarantees a better exploitation of the capabilities of modern combat aircraft.
- Increased range, payload, and survivability (ECCM) of weapon systems that are being introduced or will be introduced in the near future. Example: introduction of MIG-29 (FULCRUM); its look-down/shoot-down capability represents a growing threat to low flying aircraft such as TORNADO.
- Aging air defense systems are being replaced by improved new systems (e.g., SA-11, range 2.5–3 km, which replaces the SA-4) that have the capability to engage several targets simultaneously.
- The expansion of the ground-based air defense forces will provide for more autonomy and flexibility at the operational and tactical levels.
- The Soviet Union has a longstanding integrated air defense system, which includes the Non-Soviet Warsaw Pact countries. Its readiness and quality are constantly checked. Army air defense cooperates closely with air defense forces, and several improvements are on the horizon: (a) employment of early warning aircraft (MAIN STAY) together with such modern fighter aircraft as FOXHOUND and FULCRUM (look down/shoot down capability); (b) improvement of the SA-10 air defense missile system and the testing and deployment of the mobile SA-X-12 air defense missile system; (c) improvement of the satellite early warning system; and (d) extension of the radar surveillance system.

- The main effort of all these improvements seems to be the improvement of counter measures against cruise and ballistic missiles (early warning, identification, and tracking).

Naval Forces

The revised perception of nuclear weapons employment and the use of forces in a war against NATO also influence the Soviet naval doctrine.

- This includes the role of sea-launched-ballistic missile submarines (SSBNs) and the efforts required to secure their employment. This led to the construction of naval units (subsurface and surface combat units, such as Delta IV and Typhoon submarines; Kirov Cruiser; KIEV-class aircraft carrier; development of a traditional attack aircraft carrier) and to a doctrine of naval barriers in certain sea areas and concentration of naval forces to protect and secure the operational freedom of the SSBNs.
- The main task in the 1960s seemed to be the destruction of the most important U.S. naval assets, such as aircraft carriers and strategic submarines, but a change occurred in the 1970s. The new sea-launched ballistic missiles (SLBMs) with multiple warheads (SS-N-20, SS-N-23) have a hard target kill capability that provides the SSBN force with a first strike capability. The protection of these forces now requires the whole spectrum of the naval capabilities. Echeloned in depth, they are supposed to prevent the enemy from attacking bases and from hunting and destroying strategic submarines.
- These operations involve sea- or land-based naval aircraft equipped with long-range standoff air-to-ship missile and present a considerable threat to Western navies. These concepts, employed in recent maneuvers, could mean a somewhat greater threat to NATO's sea lines of communications. There is a current debate on this topic among Western analysts and within the naval intelligence community; the results are yet to be seen.

Command, Control, and Communications

- The Soviets have also improved command, control, and communications systems. Two noteworthy features are (1) the closely knit network of the redundant air and train-borne command, control, and communications systems able to sustain gapless control over a prolonged period (even if operations

centers and command posts are knocked out), and (2) the troposcatter communications network capable of being extended in the direction of attack by means of mobile stations available to the forces and enabling higher headquarters to maintain their constant influence as the operation proceeds.

- All of the developments foster the integration of arms and services, and enhance mobility and speed of action. Because each level of command has more organic equipment, each higher level in turn is given a broader margin of action for the employment of its reinforcements and reserves. Thus each level has a better capability than before to react to developments and to place main efforts wherever suitable.

The Strategic Offense

The development and deployment of the Soviet Strategic Missile Forces has been influenced by many factors, not all of them open to Western analysis.

- Extended deterrence may be an important factor, but it is only one among others. Strategic missiles are highly important as a deterrent to at least counterbalance the U.S. strategic forces, to offset the balance and strive for superiority.
- Available technologies, strategic assessments, geostrategic factors, political analysis of one's own capabilities versus those of the potential adversaries, historical experiences, the role of a superpower, capabilities in R&D, just to mention a few influential factors, have all played their sometimes decisive roles. The combined influence of all these factors led to the well-known structural composition of the Soviet triad. To counter Western capabilities, the Soviets maintain their strategic forces in a high state of readiness. Their main effort is concentrated on their ICBMs, fielding a superior counterforce potential (SS-17, -18, -19), which is often described as a first strike capability. Furthermore, they maintain an assured second strike capability. Besides the existing capabilities, the Soviet Union has developed two new ICBMs—SS-25 (one warhead), SS-X-24 (10 warheads), IOC probably within the next two years. They can also be employed in a mobile mode, which reduces their vulnerability.
- The SS-NX-23 SLBM lost its "X" early this year and is expected to be deployed on DELTA IV submarines. The BLACKJACK Bomber will probably be ready for deployment 1988/89. We also expect land-, air-, and sea-launched cruise missiles as a counterbalance to U.S. systems.

- Although the quality of the nuclear strike potential is growing steadily, the strategic balance as a whole will not change much.

Strategic Defense

- The security of the homeland has always been a decisive factor in Soviet strategic planning. This resulted in an air defense system against U.S. bombers fielded already in the 1950s. The existence of a Soviet ABM system around Moscow is beyond doubt. After the ABM treaty the Soviets improved their early warning network and started an intensive research program for future ABM technologies. Special interest has been given to the Krasnoyarsk radar, which the United States considers a violation of the ABM treaty.
- Soviet discussions about SDI ignore their own incentives and intentions, thereby obscuring the Soviet strategic defense program. They claim not to develop either space attack weapons or space stationed defensive systems. For the time being, the Soviets rely on their offensive capabilities as a deterrent. In addition they use every political or military-political means to deny the United States an advantage in this strategic field. Their propaganda aims at Western public opinion to exploit differences between and within NATO countries.

POLITICO MILITARY ASPECTS

The most recent examples of Soviet military political thinking can be drawn from the Party Program of the XXVII Party Congress with regard to Military Doctrine. The statements are categorized into four subject matters and, to give a preliminary assessment, compared with the 1961 party program to clarify possible developments.

Statements on the Defensive or Offensive Nature of Military Doctrine

The 1986 statement is as follows: "Soviet military doctrine is exclusively defensive in nature and aligned toward protection against attacks from the outside." The 1961 party program lacks any statement of this kind. At that time the Soviets described their military doctrine as offensive in nature, although officially not defined as such. The defensive alignment of the doctrine has only been emphasized since the late 1970s. This new direction is now officially confirmed by the 1986 party program.

But the change is not real: In its elaboration of military doctrine, Soviet military theory obviously differentiates between its "sociopolitical aspect" (military policy objectives) and its "military-technical aspect" (the practice of warfare). The former is characterized as defensive (nonaggressive) and the latter as offensive. According to our assessment of the Soviet perception of the term "politico-defensive," the known offensive concept of operations, and the offensive capabilities of the Soviet armed forces, the overall character of Soviet military doctrine has to be defined as strictly offensive in nature.

The new phrasing in the public presentation is probably motivated primarily by political propaganda considerations.

Statements on Military Superiority

The 1986 statement contains the following quotations:

- "The Soviet state and its allies do not strive for military superiority."
- "The achievement of the military strategic balance was a historic accomplishment of socialism."
- "The principle of equality and equal security."

The 1961 party program does not include any statements of this kind. Also in this context it has to be noted that in the 1960s Soviet military theory, even in its presentation to the public, still acknowledged that military and, above all, strategic superiority was a desirable and necessary objective. It was only in the mid-1970s when statements on the "renunciation of superiority" and "parity" in line with the principle of "equality" and "equal security" (1972) rose to prominence together with the concession that "partial disproportions" were unavoidable. This resulted finally in a declaration of an "approximate balance." This is now also officially confirmed by the 1986 party program.

The proportionately increasing insinuation that the United States is striving for military superiority clearly indicates that this change in diction was motivated by political propaganda considerations as well. Nevertheless, the call for military superiority did not lose its importance for the military-technical understanding. Pertinent references are contained in the current Soviet military encyclopedia.

Statements on the Possibility of Achieving Victory in a Nuclear World War

1986 statement:

- "The establishment of a military strategic balance . . . foiled all hopes of the aggressive elements of imperialism for a victory in a nuclear world war."
- "The policy of imperialist elements . . . may ultimately lead to a global military conflict that would bring about neither victory nor defeat."

1961 statement:

- "The CPSU considers it necessary that the defensive potential of the Soviet state . . . be maintained at a level that ensures the decisive and absolute destruction of any enemy."
- "The CPSU undertakes everything so that the Soviet armed forces . . . are at any time ready to deal imperialist aggressors a crushing defeat."

The different statements in the 1986 and 1961 party programs reflect the changes in at least the "declared" Soviet military doctrine on this issue that has become evident in publications and statements on military theory during recent years. Postulations in the 1960s called for destruction and defeat of the adversary, which at least indirectly inferred the belief in a real chance of victory (*Sokolovskij*). In the 1970s, faith in victory weakened. In 1979, Ogarkov still spoke of the objective possibility of victory. But until today, this has not affected the military-technical objective of Soviet military doctrine—the destruction of the adversary. According to the latest statements on military theory by top Soviet military leaders this objective can still be assessed as valid. The "declared" public doctrine, by contrast, has been dealing the traditional victory thesis a definite rebuff from a sociopolitical point of view ever since the early 1980s (Brezhnev on 23 February 1981 during the 26th Party Convention). The new thesis of the impossibility of victory has not only an obvious politico-propagandistic background but is probably intended to deter an adversary from nuclear warfare. As a rule, it is therefore—also in the 1986 party program—primarily directed at the aggressors. Thus the Soviet "defensive" position implies the hope for a victory.

Statements on the Danger *of* War and the Perception of the Enemy

- "The most urgent problem humanity is confronted with today is the problem of war and peace."
- "Imperialism threatens a new world war."
- "The policy of imperialist elements . . . may ultimately lead to a global military conflict."
- "The threat to peace . . . emanates from imperialism and its policy, the policy of the most reactionary, militarist, and aggressive elements of the present time."
- "The main bastion of international reaction is U.S. imperialism. It is whence the danger of war mainly emanates."
- "Facing the imminent catastrophe, there is only one single . . . alternative—peaceful coexistence among states with a different social order."
- "The CPSU proceeds on the assumption that there is no preordained inevitability of world war."
- "It is possible to prevent war and save humanity from a catastrophe."
- "Never before has humanity been in such terrible danger. But never before have there been such realistic possibilities of maintaining and cementing peace. If the peoples join forces, they can and must avert the danger of nuclear annihilation."

These exemplary statements from the 1986 party program on the probability of war and, respectively, the possibility of preventing it, together with references to the prevailing perception of the enemy, are in harmony with familiar principles of the "declared"-Soviet military doctrine that have not changed since the sixties. They are largely propagandistic in nature. All of the above statements are matched by statements of the same content in the 1961 party program that are not quoted here.

The 1986 statements for the most part refer to a nuclear world war, and the 1961 program also addresses the danger of local wars. Passages in the context of the enemy perception in 1961 especially mention "Japanese militarism that is dependent on the U.S. monopoly" while the 1986 text only makes particular mention of the United States/NATO as state/group of states next to general wordings (imperialism, international reaction, etc.).

Certain shifts in tenor reflect characteristics that the Soviet leaders wish to emphasize at a given point in time; they do not have the importance of fundamental doctrinal statements.

The continuity of Soviet military doctrine on these issues is consequently upheld in the 1986 party program. Predominant characteristics are:

- There is a real danger of war, including a world war that is waged with nuclear weapons;
- This danger exclusively emanates from aggressive imperialism with the United States at its center;
- Such a war constitutes a catastrophe (for the Soviet Union also); it must and can be prevented;
- This task of preventing war is the "historical mission of socialism, of all progressive and peace-loving elements."

On the whole, statements in the 1986 party program of the CPSU confirm information gained in recent years on the "declared" military doctrine. Their inclusion on the party program now constitutes their official enactment by the political leaders who are exclusively responsible for military doctrine.

In substance, these statements underline the high continuity of Soviet military doctrine. Changes as compared with statements in the 1961 party program are above all motivated by the fact that the presentation of the doctrine to the public has in the past years emphasized its "sociopolitical" side as opposed to the "military-technical" one. But the character of Soviet military doctrine continues to be governed by the "military-technical" aspect, in particular with regard to its effect on the development of military strategy and potential and the threat incorporated in them.

The political leaders pay tribute to the changed political environment with this new diction. Without any doubt it is largely motivated by propagandistic considerations.

SUMMARY

In the European perspective there is a dialectic correlation: The feeling of being threatened by extended deterrence causes the Soviet Union to enhance its capabilities, which in turn directly threaten Western Europe. In particular, the following conclusions can be drawn from the Soviet point of view:

- The propagandistic rebuttal of the thesis that a "nuclear war can be won" has not led to the conclusion that this excludes war in the classical sense (as a means of policy) for the time being.

- For propagandistic reasons the political leadership could consider a revision of the declared principle of offensive warfare. From the military point of view, however, this revision would not be desirable and would have no practical consequence.
- Since the end of the 1960s, we have seen a differentiation of options in war: Besides a nuclear war that could be started by massive disarming strikes, Ogarkov took a longer lasting nuclear war with selective strikes into consideration in 1979. Therefore, an initial conventional phase is possible, and even a merely conventional war is an option for him.
- More recent publications give the impression that the Soviet Union will direct her attention primarily to a conventional war. Despite this emphasis, the possibility of a nuclear war is "not excluded." The use of nuclear weapons for mass destruction would have "disastrous consequences for both sides."
- Current and future armament programs indicate a considerable improvement of the capability for nuclear warfare as well. Operational thinking reflects a "dual capability," too. One can conclude that it is essential for the Soviet Union to maintain a broad spectrum of options for nuclear and conventional warfare.
- The Soviet Union pretends that she is confronted with a U.S. "twofold strategic capability." This capability is allegedly based on U.S.-strategic systems and "forward-based systems" in Europe. Thus the Soviet Union deliberately ignores the legitimate security interest of Western Europe and claims for herself an unrestricted threat against the European NATO countries.
- This fundamental Soviet position is vested in a regional military superiority in Europe and reflects the intention to decouple the European theater from the strategic balance of mutual deterrence that governs the relations between the two superpowers.

VIII. EXTENDED DETERRENCE AND SOVIET STRATEGY[1]

by John Van Oudenaren[2]

Soviet leaders since 1945 have pursued two broadly parallel although at times conflicting objectives in their policy toward the West. First, they have tried to consolidate the Soviet Union's World War II territorial and political gains. Second, they have tried to minimize and if possible to eliminate what from their perspective was the main negative result of the war: the extension of American political and military power to Eurasia and in places to the very borders of the USSR.

Throughout the postwar period, the Soviets have looked for bold strategies that would simultaneously advance both objectives. Soviet pressures on Berlin in the late 1940s and again in 1958–1961, had they accomplished their intended result, would have both strengthened and legitimated the Soviet-backed German Democratic Republic (GDR) and dealt a blow to the American position in Western Europe. On the diplomatic front, Soviet proposals in the 1950s for the establishment of a European collective security system were intended to serve the same dual purpose.

While in theory the Soviets have never acknowledged a conflict between their efforts to secure a dominant Soviet influence along their own periphery and their wish to undercut the U.S. presence in Eurasia, in practice these efforts have often clashed, forcing the Soviets to emphasize the first and more immediate objective. In the 1950s and 1960s, Soviet policy toward the West was often aggressively militant. The primary objective of this policy, however, was to obtain Western recognition of the GDR and of Soviet preeminence in Eastern Europe. Not until the early 1970s did the Soviet Union achieve—with the USSR-FRG Treaty; West Germany's parallel agreements with Poland, East Germany, and Czechoslovakia; and the 1975 Helsinki Final Act—

[1]The themes in this paper are developed more fully in the author's *Soviet Policy Toward Western Europe: Objectives, Instruments, Results*, The RAND Corporation, R-3110-AF, February 1986; "The Soviet Conception of Europe and Arms Negotiations," in Uwe Nerlich (ed.), *Soviet Power and Western Negotiating Policies*, Vol. 1, Ballinger, Cambridge, Mass., 1983; and "Containment: Obsolete and Enduring Features," in Arnold L. Horelick (ed.), *U.S.-Soviet Relations: The Next Phase*, Cornell University Press, Ithaca, N.Y., 1985.

[2]The views expressed in this paper are the author's alone, and should not be construed to represent those of the Department of State or any other U.S. government agency.

what it regarded as full recognition of the territorial and political results of World War II.

Despite their preoccupation with the Eastern status quo, since 1945 the Soviets also pursued an active policy toward Western Europe, the main objective of which was to undercut American influence on the continent. In the late 1940s, Stalin used pressure on Berlin and the West European Communist parties in trying to prevent the United States from establishing a permanent presence in Western Europe through Marshall Plan aid and the founding of NATO. After Stalin's death in 1953, the Soviets launched campaigns for the creation of an "all-European security system," which they hoped would head off West German integration into NATO and provide a mechanism for the gradual elimination of the U.S. presence in Europe.

Failure to block the initial establishment of a U.S. presence in Europe forced Soviet policymakers to mount a long-range, indirect effort to achieve their objectives. They emphasized two tasks: (1) depriving Western Europe of securing options *other* than reliance on the United States; and (2) undermining the credibility of extended deterrence, the chief means by which the United States sought to provide for the security of Western Europe. In working to undercut extended deterrence, the Soviets developed policies directed specifically at the vital U.S.-West European nuclear link. In addition, they used propaganda and diplomacy to try to stigmatize nuclear weapons in general and defense postures based upon their possible use.

DEPRIVING WESTERN EUROPE OF OTHER SECURITY OPTIONS

Depriving Western Europe of security options other than reliance on the United States was to some extent a byproduct of the Soviet Union's efforts to consolidate its World War II gains. By incorporating Eastern Europe into the Soviet sphere of influence and blocking the reunification of Germany on all but Soviet terms, the Soviets made organizing either a conventional or a nuclear defense without American help politically and strategically impossible for Western Europe.

In the 1950s and early 1960s, Western governments, political parties, and academics often pointed out that security in Europe was essentially a political problem, and they put forward various disengagement proposals for central Europe, either separately or in conjunction with proposals to reunify Germany. But the Soviet Union and its allies rebuffed all such proposals, demanding instead that the West first recognize the GDR and the other postwar "realities" before talking

about security. Nor were the Soviets receptive to arms control solutions to Western Europe's fundamental security problems. In the 1950s, the Soviets resisted discussion of achievable arms control agreements with unrealistic calls for general and complete disarmament. Whenever the Soviets or their allies put forward somewhat more realistic ideas, such as the 1957–1958 Rapacki plan, their intent was usually not arms control but the political legitimation of the GDR and the isolation of West Germany.

The Soviets also opposed all Western efforts to forge a united Western Europe that would be capable of standing up to the Soviet Union, either alone or in alliance with the United States. The West Europeans themselves of course were chiefly responsible for their failure to unite, but the Soviets and the West European Communist parties contributed to undercutting European unity by direct pressure and by holding out the promise of an all-European order that would preserve the links between Eastern Europe (especially East Germany) and the rest of the continent.

The Soviets were determined to head off any West European effort to create an independent nuclear deterrent that would involve West German participation. Although there was little or no enthusiasm in the West for the development of a European nuclear force, the Soviets nonetheless saw the 1969 Nuclear Nonproliferation Treaty (NPT), which they cosponsored with the United States, as an extra measure of insurance against a German nuclear role.

With the "settlement," essentially on Soviet terms, of European political and territorial questions in the early 1970s, the Soviets became receptive for the first time to arms control and what they called "military détente" in Europe. They made clear, however, that arms control could not be used to redress the underlying political and geopolitical sources of Western Europe's insecurity and its dependence on the United States. From the Soviet perspective, the mere fact that the MBFR talks were to be convened represented a tacit admission by the West that it no longer questioned the right of the USSR to maintain troops in the heart of Europe, but only sought to adjust the size of the Soviet presence. Disengagement of all Soviet forces was no longer an objective that the West hoped to achieve in the course of an overall East-West political settlement. Rather, a political settlement already had been achieved, implicitly ratifying the USSR's right to keep huge armies in Eastern Europe.

When the actual negotiations got underway in Vienna, the Soviets also refused to concede that there were special geographical factors favoring the East for which the West could expect compensation. The Soviet view was that an approximate balance of conventional forces

already existed in central Europe, and that MBFR's task was to preserve this balance at lower levels, not to change it in favor of the West. MBFR therefore not only coincided with an end to most serious discussion of the political sources of Western Europe's security situation, it also helped to foreclose discussion of strictly military factors (the difficulties of reinforcing Europe from North America, the USSR's strategic depth and Western Europe's lack thereof) that still might have been addressed without calling into question the existing political order.

At the Conference on Security & Cooperation in Europe (CSCE) the Soviets also refused to acknowledge the existence of geographic or geopolitical asymmetries favoring the East. By limiting the largely symbolic confidence-building and security measures (CBSMs) negotiated at CSCE to a 250-kilometer-wide strip of Soviet territory, the Soviets established the precedent that the vast majority of even the USSR's European territory would be exempted from any international regime ostensibly designed to enhance security in Europe.

The same Soviet reluctance to allow arms control to be used to redress fundamental geographic asymmetries was evident at the Madrid CSCE Review Conference and at the Stockholm Conference on Disarmament (CDE) that was convened under the Madrid mandate. CDE originally was a French idea that was endorsed by the Western allies. The French initially proposed that the European countries discuss the adoption of militarily important CSBMs from the Atlantic to the Urals.[3] The Soviets countered by agreeing to extend CSBMs to the Urals, provided there was a counterbalancing extension into the Atlantic.

The Madrid mandate basically favored the Western point of view but was sufficiently vague to enable the Soviets and their allies to press, in the detailed negotiations in Stockholm, for the extension of CSBMs to "independent" air and naval activities. As in MBFR, the Soviet position was that there were no fundamental geographical asymmetries and that the presence of Soviet land forces in Europe was in effect politically and strategically equivalent to the presence of American aircraft carriers in the Norwegian Sea.

At Stockholm, however, the West held firm, and the Soviets faced the prospect either of a failed conference or of agreeing to CSBMs to the Urals—without the counterbalancing extension. Gorbachev in effect chose the latter when, in his January 15, 1986 statement calling for the complete elimination of nuclear weapons by the year 2000, he

[3]For an unofficial French view of CDE, see Benoit d'Aboville, "CBMs and the Future of European Security," in F. Stephen Larrabee and Dietrich Stobbe (eds.), *Confidence-Building Measures in Europe*, Institute for East-West Security Studies, New York, 1983.

proposed "postponing" the discussion of naval forces. Gorbachev's willingness to "postpone" this issue represented a substantial negotiating victory for the West and paved the way for conclusion of a CDE agreement in September 1986 that at least implicitly acknowledges the relevance of geographical asymmetry to West European defense. Soviet officials have made clear, however, that they are determined to take up the "postponed" questions in a follow-on to the CDE, the mandate for which will be negotiated at the Vienna CSCE Review Conference.

Gorbachev made another break with longstanding Soviet practice in an April 1986 speech in East Berlin by proposing conventional arms reductions in Europe in the entire zone "from the Atlantic to the Urals." Gorbachev's proposal, which subsequently became the basis for the Warsaw Pact's "Budapest Appeal" of June 11, 1986,[4] opens the way, at least in theory, for a discussion of geographic asymmetries that is precluded by the MBFR terms of reference. So far, however, there has been no change in the standard Soviet contention that a conventional balance already exists in Europe, and that the purpose of any new arms control initiative should be to preserve this balance at lower levels. In concrete terms, the Soviets are calling both sides to reduce troop levels by 100,000 to 150,000 within "one or two years," and for both sides to make larger but roughly equal cuts by the 1990s.

A final element in the Soviet effort to deprive Western Europe of security options other than reliance on the United States concerns the British and French nuclear deterrents. Historically, the Soviets have campaigned against these systems mainly as a way of wringing extra concessions from the United States in the U.S.-Soviet arms control talks or to generate popular opposition in Western Europe to the deployment of INF. In raising these systems with the United States in various arms control forums, the Soviets clearly have been more interested in gaining compensation from the United States than in limiting the systems themselves.

In recent years, however, the Soviets have made clear that they regard the right of Britain and France to expand and modernize their deterrents as contingent upon developments in the U.S.-Soviet nuclear balance. This Soviet demand, spelled out in Gorbachev's January 1986 statement and rejected by the West, is intended to deprive Western Europe of an autonomous security option by subordinating Western security policies to the Soviet Union's claim to "equal security" with regard to the United States.

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[4]The "appeal" appeared in *Pravda*, June 12, 1986.

UNDERCUTTING THE CREDIBILITY OF EXTENDED DETERRENCE

While working to close off political and arms control solutions to Western Europe's security dilemmas, the Soviets have used both politics and arms control to undercut the remaining pillar of West European security—extended deterrence. The chief Soviet weapon against extended deterrence is military, but political means are essential for making military power an effective weapon against deterrence.

In the late 1940s and early 1950s, Soviet leaders regarded their inability to strike the United States with nuclear weapons and their own vulnerability to attack by "forward-based" U.S. nuclear weapons as an intolerable source of political weakness in the East-West competition. To overcome this weakness, the Soviets relied on a combination of genuine military and technological breakthroughs and a considerable amount of pure bluff. Khrushchev engaged in extensive "rocket rattling" designed to demonstrate to Britain and France that they were no longer first-rate powers. He later boasted of Soviet nuclear achievements in efforts to pressure the United States to yield to Soviet demands regarding the status of Berlin.

Khrushchev's failure in Berlin and the outcome of the Cuban missile crisis ultimately convinced the Soviet leadership that bluff was not an adequate response to U.S. nuclear superiority and that more than bluster was required to advance Soviet political objectives in Europe. Therefore, the Kosygin-Brezhnev leadership that replaced Khrushchev decided to sidestep the Berlin problem and to begin a long-range effort to shore up the Soviet Union's global military and political position with regard to the United States. This effort concentrated on achieving genuine strategic parity, which eventually paved the way for the SALT talks that were launched at the end of the decade. While striving for parity with the United States, the regime launched parallel moves to develop closer bilateral relations with the countries of Western Europe. It also revived the idea of an all-European conference. By the early 1970s, these incremental policies had achieved results: "normalization" in Europe and the establishment of a special bilateral relationship with the United States centered around SALT and the regulation of the nuclear competition.

The Soviets then tried to enlist both the U.S.-Soviet arms control process and the emerging political détente with Western Europe in their campaign to undercut extended deterrence. The Soviets generally have followed Western strategists in concluding that the robustness of extended deterrence is related to the U.S.-Soviet strategic nuclear balance. To the extent that SALT put a brake on improvements in

American offensive and defensive systems and directed attention to the political significance of parity, it contributed to Soviet objectives with regard to Western Europe. By foreclosing, with the ABM agreement, even the theoretical possibility that the United States would reacquire a position of invulnerability to Soviet nuclear attack, the Soviets no doubt believed they were protecting the political and military value of their own investments in strategic forces.

In addition, the Soviets tried to use SALT against the U.S. "forward-based systems" (FBS), which not only contribute militarily to the U.S. deterrent, but provide a visible symbol of the American commitment to Western Europe. Early in the talks Soviet negotiators surprised their American counterparts by demanding that the United States count its FBS against its totals of strategic nuclear weapons. Had the United States yielded to this Soviet demand, it would have endorsed the Soviet view that all weapons capable of striking the other side's territory should be counted as strategic. Acceptance by the West of this definition in turn would mean that the Soviet Union's claim to "equal security" with regard to the United States would take precedence over Western Europe's claim to any security with regard to the Soviet Union.

In the interest of achieving agreements with the United States on central strategic systems, the Soviets eventually "agreed to disagree" on FBS. Contrary to what is often suggested in the West, however, the Soviets have never fully abandoned their initial demands for compensation from the United States for FBS. Although the Soviets may again look for ways to sidestep the FBS issue at Geneva for the sake of achieving an accord on strategic weapons (or at least of making their own proposals more credible in Western eyes), past experience suggests that they regard elimination of FBS as an essential element in their effort to undercut extended deterrence and will continue to hammer on the issue.

In parallel with the arms control process, the Soviets launched a diplomatic campaign designed to undermine the political bases of extended deterrence. In essence, they have tried since the early 1970s to conclude bilateral and multilateral understandings with Western governments that could be seen as superseding or in conflict with these governments' obligations to their Western allies. Soviet efforts along these lines have proceeded on two separate tracks, the one directed at the United States, the other at Western Europe.

The Soviets have sought to conclude agreements with the United States that in principle would circumscribe and in practice call into question the American willingness to use nuclear weapons in response to a conventional attack on Western Europe, as called for by NATO

strategy. In 1970, the Soviets approached the head of the U.S. SALT delegation with an informal offer to discuss the conclusion of a U.S.-Soviet agreement on no first use of nuclear weapons.[5] Kissinger recalls that in April 1972, as he and Brezhnev made final preparations for the Moscow summit, the Soviet leader took him aside and proposed that both sides come to an "understanding" that they would not use nuclear weapons against each other.[6] The Soviets floated the same idea several weeks later with President Nixon.[7] Although these attempts to secure a no first use agreement or an agreement singling out nuclear use were not successful, the Soviets gained what they saw as a partial success with the conclusion in 1973 of the "Agreement on the Prevention of Nuclear War," which at least some Europeans saw as inconsistent with U.S. obligations to NATO.[8] In 1982, at the height of the Soviet campaign against the deployment of INF in Europe, the USSR claimed that it had unilaterally renounced the first use of nuclear weapons and called upon the United States to make a similar declaration.

Although the Soviets probably now see little chance of pressuring the United States into accepting no first use, they are persisting with indirect efforts to use the U.S.-Soviet bilateral dialogue to undercut U.S. nuclear guarantees. The phrase "a nuclear war cannot be won and must never be fought," which appears in the November 1985 Reagan-Gorbachev communique, is misused in this effort. The Soviets frequently substitute "unleashed" for "fought" in the statement and attempt to portray President Reagan's expression of moral abhorrence of nuclear war as a pledge with operational consequences for Western defense policy.[9]

In addition to these bilateral approaches to the United States, the Soviets have tried to use multilateral forums, notably CSCE and CDE, to pressure NATO in the direction of no first use. Although CSCE has

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[5]See Gerard Smith, *Doubletalk: The Story of the First Strategic Arms Limitation Talks*, Doubleday, New York, 1980, pp. 190–191.

[6]Henry A. Kissinger, *White House Years*, Little Brown, Boston, 1979, p. 1208.

[7]Ibid.

[8]See *Strategic Survey, 1973*, IISS, London, 1974, p. 64.

[9]For reasons that neither government has explained, there appear to be differences of nuance between the English and the Russian versions of the communique on this key point. In the Russian, the phrase "a nuclear war cannot be won and must never be fought" is rendered "*iadernaia voina nikogda ne dolzhna byt' razviazana, v nei ne mozhet byt' pobeditelei.*" The order of the clauses (traditionally of significance in legal or quasi-legal agreements between governments) is reversed, and "fought" and "unleashed" are not exact equivalents. Soviet English language references to the communique (e.g., TASS in English) always use "unleashed" rather than the original wording of the official English text. The English version of the communique appears in the Department of State *Bulletin*, January 1986, pp. 7–10; the Russian in *Sovetsko-amerikanskaia vstrecha na vyshem urovne*, Moscow, Izdatel'stvo politicheskoi literaturny, 1985, pp. 13–17.

no mandate to address nuclear issues, in 1976 the Warsaw Treaty Organization proposed that all the participating states of the CSCE sign a pledge not to be the first to use nuclear weapons against each other. At CDE, the Warsaw Pact states initially favored conclusion of a multilateral no first use agreement. In the face of Western resistance, they scaled down this objective and came out in favor of an agreement reiterating the inadmissibility of use or resort to both nuclear and conventional force. From the Soviet perspective, explicit mention of the nuclear threat, even if coupled with mention of conventional force, would represent another small step toward placing nuclear weapons and defense postures based on them in a special political, legal, and moral category. In his political report to the Twenty-seventh Party Congress, Gorbachev reiterated this proposal in a slightly different form, calling for "a renunciation by the nuclear powers of either nuclear or conventional war against each other or against third states."[10]

While pressing the Americans to conclude agreements or to make joint statements that could be seen as qualifying American nuclear guarantees to third countries, the Soviets have urged the West Europeans to enter bilateral and multilateral arrangements with the East that would conflict, in principle and in practice, with their obligations to NATO. The Soviets have been pressing for the establishment of internationally guaranteed nuclear-free zones in northern Europe, central Europe, the Balkans, and the Mediterranean, and are particularly enthusiastic about a nuclear-free zone in the Nordic region. Although establishing such a zone would yield no concrete military benefit to the Soviet Union, it would deal a political blow to NATO cohesion.

Denmark and Norway do not host foreign troops or nuclear weapons on their soil in peacetime, but as members of NATO they have endorsed flexible response and have not ruled out, at least in theory, a nuclear role in wartime. Establishment of an internationally guaranteed nuclear free zone would place upon these countries East-West political obligations that in the Soviet view would take precedence over their obligations to their allies.

Creation of or even substantial progress toward a nuclear-free zone in northern Europe also would give impetus to the creation of a nuclear-free zone in Central Europe, which would have far greater implications for Western security. The Soviets are in fact supporting the Palme Commission's call for a nuclear-free zone in central Europe, but have argued that the proposed zone be widened from 300 to 600 kilometers. This would effectively denuclearize the FRG and most of

[10]*Pravda*, February 26, 1986.

the Benelux. The Soviets have endorsed efforts of the East German Socialist Unity Party (SED) to draft with the West German Social Democratic Party (SPD) a joint proposal for the establishment of a nuclear-free corridor along the intra-German border.

In addition to these regional proposals, the Soviets are interested in negotiating bilateral guarantees with the individual NATO states. In 1978, the Soviet government issued a statement pledging that the USSR would never use nuclear weapons against states that renounce their production and do not have nuclear weapons on their territory. Although the Soviets presented this step as a unilateral gesture, they have indicated they are willing to formalize their alleged no use policy in bilateral agreements.

The Soviets also have indicated a willingness to formally guarantee the security of a post-nuclear Britain. In talks in Moscow in late 1984, General Secretary Chernenko told Labour Party leader Kinnock that the Soviet Union "would be prepared to reduce and physically liquidate a part of its medium-range missiles in the European part of the USSR that would be equal to the number of nuclear missiles liquidated by the British side." According to *Pravda*, "implementation of complete nuclear disarmament by Britain with liquidation of corresponding foreign bases would create conditions under which the USSR would guarantee that its nuclear weapons would not be targeted on the British territory. [Such guarantees] could become a subject of discussion and appropriate agreement between the USSR and Britain."[11] Gorbachev alluded to this offer in his May 1986 meeting with a British parliamentary delegation led by Deputy Prime Minister Whitelaw.

The UN General Assembly is yet another forum in which the Soviets have campaigned against NATO nuclear strategy. In 1972, the Assembly passed a Soviet-proposed "Solemn Statement by the Organizations Member States on the Nonuse of Force in International Relations Linked Inextricably with the Prohibition of Nuclear Weapons for All Time." This and subsequent General Assembly appeals were directed chiefly at the USSR's Third World constituency and were designed to highlight the split between NATO and the rest of the world on nuclear issues. In recent years, however, these General Assembly appeals have become a source of intra-NATO divergences, as Greece and some of the NATO countries have chosen (or been forced by parliamentary pressures) to support resolutions that could be seen as singling out nuclear deterrence for special condemnation and by implication the very basis of NATO strategy.

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[11] *Pravda*, November 27, 1984.

In addition to these political and arms control measures directed specifically at extended deterrence, the Soviets have tried to stigmatize all nuclear weapons and defense postures based upon their possible use. At least since 1956 and the Twentieth Party Congress, "peaceful coexistence" rather than social revolution has been the main theme in Soviet foreign propaganda. Gorbachev's unilateral testing moratorium and his January 1986 call for the elimination of all nuclear weapons by the year 2000 are only the latest steps in an ongoing campaign. Its antecedents include the Communist-led anti-"neutron bomb" campaign of 1977–1978, the Communist Easter marches of the late 1950s and early 1960s, and the Stockholm Appeal of the early 1950s.

In the 1970s, the Soviets intensified their peace propaganda and linked it to the "implementation" of a series of programs emanating from the quinquennial CPSU congresses: the 1971 Peace Program, the 1976 Program of Further Struggle for Peace and International Cooperation, the 1981 Peace Program for the 1980s, and the 1986 Gorbachev call for the creation of an "all-embracing" or "comprehensive system of international security," one element of which is the program for the elimination of nuclear weapons by the year 2000.

In appealing to and trying to influence audiences in the West, the Soviets have steered clear of the frontal attacks on NATO and the U.S.-West European security relationship that characterized Soviet propaganda in the 1950s and 1960s. Instead, they have pressed the theme that the Soviet and West European peoples share "a common home," and that they must join together to prevent nuclear war from destroying the continent. In pressing this theme, the Soviets invariably characterize American policies as the main source of the alleged war danger.

In Europe, the Soviets clearly have made the Socialist and Social Democratic parties the focal point of their campaign against nuclear weapons, and have been gratified at the extent to which these parties have been attracted to nuclear-free zones, no first use declarations, and other policies incompatible with NATO doctrine. In the United States, the Soviets look more to the professional arms control community, the scientific community, and religious groups as sources of potential support for a change in U.S. nuclear policy.

Soviet propaganda efforts have become increasingly sophisticated in recent years. Vadim Zagladin, Georgi Arbatov, and many other mid- to high-level Soviet spokesmen have become articulate promoters of the Soviet point of view in the Western media and at Western forums in

which security issues are discussed.[12] These propagandists have skillfully spread the message that the United States is seeking a "first strike" capability as part of its plans to prepare for winning a nuclear war. By concentrating their fire on accurate weapons such as MX and the Pershing II as well as on defensive systems, the Soviets *imply* that they support maintenance of peace by reliance on mutual deterrence. Even in public forums in the West, however, Soviet spokesmen never explicitly endorse mutual deterrence. Rather, they talk about overcoming reliance on nuclear weapons by political means—by creating a system of "collective security" along the lines of longstanding Soviet proposals.

Soviet propaganda is supplemented by an ever-growing network of formal and informal ties with Western organizations. During the Cold War, Western trade unions, the socialist parties, and many other groups severed their ties with their Communist and Soviet counterparts. In the 1970s, however, these ties were gradually reestablished, as U.S.-Soviet and Soviet-West European détente at the governmental level legitimized contact with the Soviets in other forums. In the course of the INF debate, Soviet trade unions, professional organizations, and other groups sought to make "peace" the focal point of discussion and if possible joint action with their Western counterparts. The Soviets are now following the same approach in their campaign against SDI, although with somewhat less success.

The growing sophistication of Soviet propaganda and the network of Soviet ties with groups in the West allow the Soviet leadership to exert considerable pressure on Western governments. Although these pressures failed to head off the INF deployments, the Soviet leaders no doubt were encouraged by the upsurge of anti-nuclear and anti-American sentiment in Western Europe after 1979 and may believe that INF was a Pyhrric victory for the West. By continuing to hammer away on INF, SDI, and all other potentially controversial defense issues, the Soviet leaders may hope to erode the West European consensus in support of NATO and ultimately negate political support for extended deterrence.

Gorbachev's January 1986 "plan" to eliminate nuclear weapons by the year 2000 reflects what appears to be an increasingly propagandistic Soviet approach to arms control. The highly public manner in which the proposal was unveiled and the simplistic call for eventual total nuclear disarmament recall the Soviet propaganda crusades of the

[12]For an in-depth study of Soviet propaganda, see John Van Oudenaren, *Interviews by Soviet Officials in the Western Media: Two Case Studies*, The RAND Corporation, R-3328/FF-RC, October 1985.

1950s rather than the tedious negotiations that led to SALT I and SALT II in the 1970s. The Soviets probably believe that they will pay little for shifting to a purely propagandistic approach. When they are ready for serious bargaining leading to an agreement, the Soviets can take particular elements of the Gorbachev "plan" and transform them into negotiable arms control positions. Any East-West arms control agreement could then be portrayed as a partial step leading to full "implementation" of the plan to rid the world of nuclear weapons.

THE OUTLOOK

In the short to medium term, the INF deployments and the U.S. strategic modernization programs are likely to enhance the credibility of extended deterrence. In addition, with SDI the United States has partially preempted Soviet efforts to stigmatize nuclear weapons by providing a U.S. vision of how to overcome dependence on them over the long term. Therefore, the Soviets are potentially faced with the worst of two worlds: a negation of their military and political efforts to undercut extended deterrence, and a loss of their monopoly on the moral high road of stigmatizing all nuclear weapons.

Against this background, Gorbachev appears to be mounting an ambitious effort to regain the initiative against Western nuclear strategy. It is too early to tell whether the new activism on the propaganda level will be accompanied by enough change in Soviet negotiating positions to yield actual arms control agreements at Geneva. But at some point Gorbachev may conclude that improved propaganda and packaging of Soviet proposals are not advancing Soviet interests and decide to make the concessions necessary to produce agreements. In June 1986, the Soviets took a step in this direction when they dropped their earlier demand that even research on "space strike" arms be banned and called for a 15–20 year commitment not to withdraw from the ABM treaty.

With or without such agreements, however, the Soviets are likely to conclude that extended deterrence remains effective and that military action against Western Europe is still far too risky to contemplate. The very effectiveness of extended deterrence, however, is likely to spur the Soviets to continue their efforts to undermine it as a way of advancing their political and security objectives in Europe.

IX. OPTIONS FOR THE U.S.-SOVIET STRATEGIC ARMS NEGOTIATIONS AT GENEVA: A U.S. PERSPECTIVE

by Edward L. Warner III and David Ochmanek

INTRODUCTION

This paper reviews the U.S.-Soviet negotiations on nuclear and space weapons now taking place in Geneva. It seeks to identify the most important issues facing the two sides in each of the three negotiating forums: strategic offensive forces, defense/space weapons, and intermediate nuclear forces. It also explores a range of possible compromise outcomes for each set of talks.

The paper has been updated since its presentation at the conference on Extended Deterrence and Arms Control in March 1986. It now incorporates analysis of the U.S. and Soviet positions in the talks as of early July 1986.

U.S. AND SOVIET OBJECTIVES IN ARMS CONTROL

The United States and the Soviet Union bring several objectives to the arms control process, some shared and many conflicting. Before we examine the particulars of both sides' positions in the START, Defense/Space, and INF forums of the Geneva negotiations, it is helpful to review the primary objectives they are pursuing in these negotiations.

Shared Objectives

The basis for arms control or any other successful negotiation between roughly equal parties should be a set of objectives shared, at least to some degree, by both sides.

Increase Arms Race Stability. Both sides would like to reduce uncertainties in their estimates of the future course of their opponent's strategic force structure. Given inherent tendencies for conservative planning and the long lead times involved in developing and deploying modern weapons, such uncertainties can tend to drive weapons deployments upward without commensurate increases in security. Formal

arms control agreements offer the prospect of channeling modernization within reduced and predictable force levels.

Increase "First Strike/Crisis Stability." The most commonly stated formulation of this objective is "to reduce the risk of nuclear war." More precisely, arms control should contribute to the stability of the deterrent balance by reducing the incentives for either side to launch a first strike against the other's strategic forces. This conception of stability is two-sided: That is, first-strike stability exists when neither side calculates that it would be better off, in relative or absolute terms, after launching a would-be disarming first strike against the other; and neither side feels compelled to launch such an attack, particularly in the midst of an intense crisis, in order to avoid the far worse consequences of going second. Arms control can contribute to first-strike stability by providing for mutual reductions in the overall destructive capacity of strategic nuclear forces and by permitting unilateral measures to increase the survivability of strategic retaliatory forces.

Codify Parity. Neither the United States nor the Soviet Union is willing to accept a status of clear-cut inferiority in strategic nuclear capability. The obverse of this is that neither side is likely to be able to achieve or, if achieved, to long maintain strategic nuclear superiority, however defined, over the other.

Definitions and measures of strategic superiority (or inferiority) can be ambiguous and prone to subjective, sometimes controversial interpretations. The actual operational capabilities of each side's forces are difficult to assess and depend on such things as the size and character of enemy target sets being held at risk, missions assigned to forces, command and control infrastructure, employment doctrine, operational proficiency, etc. However, static measures of forces, such as numbers of strategic nuclear delivery vehicles (SNDVs), aggregate ballistic missile throwweight, and the number of deliverable weapons, are widely viewed as reasonable indicators of force capability. By reaching an agreement that sets equal limits on some or all of these static measures, both sides can reduce ambiguities pertaining to perceptions of their relative standing. Because perceptions of the force balance are important factors in both deterrence and the broader dynamics of international politics, avoiding inequalities in static measures has substantial value.

For the United States, which of late has found itself behind the Soviets in many *quantitative* measures of military capabilities, the benefits of such an agreement are obvious. For the Soviet Union, a new strategic arms agreement would serve as another symbol ratifying their status as a superpower coequal to the United States.

Public Opinion. Both sides have substantial interests in winning what has become a public relations battle over arms control issues. U.S. administrations—especially the current one, after it got off to a belligerent start in its relations with the Soviet Union—need to appear reasonable and accommodating in the arms control process. This applies, for political reasons, to domestic audiences and, for alliance management reasons, to foreign audiences in Western countries. Although the Soviet regime may also have some domestic and alliance management considerations to take into account, it plays largely to the same Western audiences as the United States does. Its goals are to play upon divisions on the American domestic scene and to sow discord among the Western allies. The U.S. government has little opportunity to exploit public opinion on the Eastern side. Rather it must seek to manage public and governmental pressures at home and abroad for movement toward agreement. These motivations, though divergent, prompt both sides to at least appear flexible and forthcoming in arms reduction talks and thus somewhat perversely may contribute to their motivations to reach agreements.

Divergent Objectives

Naturally, both the United States and the Soviet Union also pursue several objectives in and through arms control that diverge, sometimes sharply. As with any negotiation, these opposing objectives are partly reflected in each side's efforts to "get the best deal" for itself by pushing for an agreement that protects its unilateral advantages while reducing those of the other side. Divergent objectives also stem, however, from more deep-seated differences in the nature of the two nations' strategic forces, as well as their governments, societies, and alliance systems. The strength of these opposing objectives relative to the shared objectives listed above, plus the considerable inertia deriving from established patterns and bureaucratic interests, combine to limit both sides' flexibility in arms negotiations.

SDI. The United States seeks to retain or even expand the degree of flexibility it now enjoys to explore technologies that could support an effective, multilayered defense against ballistic missiles. Over the longer term, it seeks to retain the option to deploy such a defense, should the requisite technologies prove feasible. Thus, the United States will resist Soviet efforts to tighten ABM Treaty provisions regarding the development and testing of space-based ballistic missile defense components and may seek modifications that would facilitate the deployment of a multilayered ballistic missile defense system in the early to mid-1990s.

Moscow, troubled by a laggard economy and substantial disadvantages in key technologies for next generation missile defenses, at a minimum seeks assurances that the United States will not begin field testing and deployments of elements of a nationwide BMD system over the next decade or so. Moreover, the Soviets certainly do not want to find themselves in a position where the United States deploys a large, high technology missile defense system just after the Soviets have completed substantial reductions of their ICBM and SLBM forces under a START Treaty. They have also made clear their desire to halt the U.S. antisatellite (ASAT) program.

More broadly, Moscow would probably like to minimize the flow of U.S. resources being devoted to high technology research and development under the rubric of SDI, not only because of the program's potential to shift the strategic balance, but also because the Soviets believe it has the potential to produce numerous "spinoff" technologies with potential applications to conventional as well as strategic defense.

Soviet BMD. The current U.S. administration is committed to pursuing a vigorous research and development program under the SDI, but for the next several years, the United States also would like to retain existing treaty constraints on Soviet BMD programs, the vast majority of which are based on technologies of the early to mid-1970s. It will therefore in general seek to enforce the ABM Treaty's prohibitions against the deployment of ABM systems at sites other than the permitted 100 launcher system around Moscow, concurrent testing of ABM and SAM components, development of mobile land-based ABM systems, etc.

Verification. Because it is an open society, the United States has a greater interest than the Soviet Union in improving measures to ensure that compliance with arms control agreements can be reliably verified. Measures providing for reduced encryption of telemetry from missile tests, cooperative measures to enhance the effectiveness of national technical means (NTM), and extensive on-site inspection (OSI) of key installations, particularly with regard to mobile missile systems, may therefore be rather high on the U.S. list of negotiating objectives. Recent pronouncements from Moscow professing increased Soviet willingness to consider more extensive monitoring regimes notwithstanding, the Soviets can be expected to resist many U.S. proposals in this regard.

Forward-Based Systems. As in SALT I and SALT II, in the wake of their June 1986 proposal the Soviets seem to have all but formally fallen off their recurring demand that U.S. forward-based systems that can strike Soviet territory be included within strategic arms control treaty limits. To maintain parity in intercontinental delivery systems

under this definition, the United States would have to abandon or severely cut back its important nuclear-capable land- and carrier-based fighter-bombers in and around Europe and the Far East. Alternatively, if the United States chose to preserve these aircraft in these theaters, it would be compelled to accept considerable inequality in intercontinental nuclear weapons. Because such an accounting would grant the Soviets a totally one-sided advantage, the United States will find any Soviet effort to return to such a formulation completely unacceptable.

Cruise Missiles. A somewhat related issue arises from the apparent asymmetry in interests regarding the deployment of long-range, nuclear-armed, air-launched, ground-launched, and sea-launched cruise missiles (ALCMS, GLCMs, and SLCMs), defined as those having a range of 600 kilometers or greater. The Soviets have consistently called for banning the deployment of these cruise missiles since the early stages of SALT II. They eventually acquiesced in SALT II to permitting the deployment of ALCMs but continued to try to bar SLCM and GLCM deployments. The United States rejected a long-term deployment ban proposal but agreed in the protocol to the SALT II treaty not to deploy any sea-launched or ground-launched cruise missiles until after 31 December 1981. Having complied with this commitment, the United States began deploying GLCMs in November 1983, almost two years after the expiration of the protocol, and began SLCM deployments in the summer of 1984. Since the initiation of the INF and START talks in 1981 and 1982, respectively, the GLCM has been addressed as a long-range missile within the INF negotiations, while the SLCM issue continues to defy solution within the START discussions.

Regarding SLCMs, the United States has stated that unless a feasible way is devised for monitoring the numbers of nuclear-armed SLCMs produced or deployed, numerical limits on them should not be considered. The Soviet position in their October 1985 proposal, which reportedly remains on the negotiating table, is that the deployment of long-range SLCMs should be banned. This position was substantially modified in the Soviets' June 1986 "interim" proposal, which called for a ban on nuclear SLCMs aboard surface ships but would permit them aboard designated classes of submarines. The Soviets propose to count these cruise missiles within the aggregate weapons ceiling of a strategic arms agreement. They might settle for a separate ceiling on SLCMs. The United States has shown no interest in either of these approaches, primarily because of verification problems. (A more detailed review of the issues posed by SLCMs for arms control is found in Appendix B.)

Strategic Force Modernization. The Soviets' continuing proposals to ban or strictly limit the development and deployment of new strategic

weapon systems defined, to Soviet advantage, as those that have not yet entered flight testing, reflects the fact that many of their next generation weapons have already been flight tested. They seem to have concluded, therefore, that the United States has more to gain from such deployments than they do.[1] Without question, Moscow would like to halt the D-5 SLBM, advanced technology (stealth) bomber, and small ICBM (SICBM) programs short of their deployment phases. Given the criticality of these and other new weapon systems to the future survivability and effectiveness of the U.S. Triad, a ban on their development or deployment will remain unacceptable to the United States.

Mobile ICBMs. In the face of a growing threat to Soviet silo-based ICBMs posed by the improved accuracy of new U.S. ICBMs and SLBMs, mobile ICBMs are as important to the Soviet Union as the new systems mentioned above are to the United States. There is no chance that the Soviet Union would accept a ban on mobiles under any foreseeable circumstances. Particularly in light of continued funding for the development of the SICBM, it seems likely that the United States is not strongly wedded to its November 1985 proposal to ban mobile ICBMs.

Force Structure Asymmetries. The markedly different force structures of the two sides form the basis of substantial and deep-seated difference in their START preferences. The United States views the Soviet strategic offensive force, with two-thirds of its weapons on ICBMs, as unbalanced and first-strike oriented. (See Appendix A for a comparison of the current Soviet and U.S. strategic force structure.) U.S. determination to reduce the prompt counterforce component of the Soviet force, in tandem with its desire to preserve a fairly large bomber force, underlies its tendency to put forth proposals that would force major changes in the composition of Soviet strategic forces. The Soviet Union, in contrast, would prefer maximum latitude to retain its current emphasis on ICBMs, including its heavy silo-based SS-18-class missiles, while containing, or if possible reducing, the very large U.S. inventory of bomber-carried weapons. Naturally, neither side will find major shifts in its strategic force structure congenial.

INF. The central question for the United States in the INF negotiations has become one of reducing Soviet advantages in both longer and shorter range INF missiles without undercutting the indispensable U.S. nuclear guarantee to the defense of its Western European allies

[1]Soviet willingness to propose a ban on force modernization may also indicate that they have judged it possible to circumvent such limits by claiming, as in the case of the SS-25, that additional new systems are merely follow-on modifications of existing systems.

within the NATO flexible response strategy. The negotiations are complicated by the fact that there is an across-the-board imbalance in INF systems: Because the Soviets enjoy substantial superiority in every category of system, the United States has limited bargaining leverage. Equally important is the fact that constraints on the negotiators' flexibility are intensified by the political symbolism of longer range INF missiles—Soviet SS-20s, based throughout the USSR, and U.S. Pershing IIs and GLCMs recently deployed in several Western European countries. Moreover, the involvement of the core security interests of the most important U.S. allies unavoidably restricts U.S. flexibility and invites Soviet bargaining tactics aimed more at propaganda and disruption of the alliance than at achieving a mutually satisfactory compromise.

Briefly, the key *U.S. objectives* in the INF talks are:

- Maintain support for its negotiating position among the governments of the Western Alliance (including Japan). This means, among other things:
  - — Refusing to become involved in efforts to constrain the modernization of UK or French nuclear forces, or to provide compensation for these forces.
  - — Seeking agreement on equal, *nonzero* limits on U.S. and Soviet long-range INF (LRINF) missiles globally and in Europe.
  - — Gaining substantial reductions in Soviet LRINF missiles within range of East Asian allies and friends.
  - — Rejecting demands for a ban on the transfer of intermediate-range or strategic systems to third countries.
- Retain some number of modern, effective LRINF missile systems in NATO Europe, valuable both for their contribution to NATO's military capability in-theater and, more important, as a visible symbol of the coupling of the U.S. central strategic deterrent to NATO's security. The United States and its allies should also avoid trading away all of these systems simply because Western European governments expended so much political capital over the past several years to get them deployed. (Because the United States formally proposed reductions to zero LRINF missiles and the allies long supported this position, both parties find themselves in a rather awkward position following the Soviets' acceptance of a variant of the U.S. "zero option" that calls for no U.S. or Soviet LRINF missiles deployed in Europe.)
- Refuse to agree to limits on the procurement and worldwide deployment of U.S. tactical aircraft.

- Prohibit Soviet circumvention of LRINF ceilings by means of a build-up of shorter range missile systems—the SS-21, -12/22, and -23.

Soviet Objectives in the INF talks are quite antithetical to these. They include:

- Erode the credibility of the U.S. deterrent in Europe and Asia by retaining and increasing Soviet superiority in the theater nuclear balances.
  - — Gain withdrawal or reductions of U.S. Pershing II and GLCM deployments in Western Europe.
  - — Avoid or minimize reductions of Soviet LRINF missiles in Asia.
  - — Retain the pronounced Soviet numerical advantage in medium bombers.
  - — Retain Soviet superiority in shorter range nuclear delivery systems (e.g., Frog, Scud, SS-21, -12/22, -23).
- Create or exacerbate divisions within the Western Alliance. This means identifying the United States as the primary obstacle to nuclear arms reduction. It also means manipulating proposals so as to increase suspicions of Washington among the allies and friends of the United States in Europe and Asia.
- Undermine the long-term viability of the UK and French nuclear forces by halting or reducing the scope of their modernization efforts.

START

The Soviets have persistently maintained that an agreement to reduce strategic offensive weapons is inextricably linked to an agreement governing the development, testing, and deployment of "space strike weapons"—chiefly, the space-based components of a multilayered ballistic missile defense system. The Soviets do seem seriously concerned about the potential for U.S. technological prowess—spurred by a high-priority SDI development program—to enable Washington to "leapfrog" the Soviets in both the strategic and conventional military balances. This concern seems to have motivated considerable movement on Moscow's part toward new strategic arms control offers, several elements of which are attractive to the United States. However, even given a mutually satisfactory interim agreement covering the development and testing of defensive weapons, formidable differences would remain in the two sides' positions on offensive arms.

Despite continued disagreement over the Soviet-proposed ban on new strategic systems, the basic issue facing both sides in START is not whether to constrain the process of force modernization *per se*. Rather, it is how to channel the process of modernization along lines and within limits that are predictable, stabilizing, and, most challenging, mutually acceptable.

Both sides deem continued offensive strategic force modernization essential to their continued security. Modernization that results in more survivable retaliatory forces can complement arms control in achieving increased first-strike stability. START should not be seen as a way to save resources by prohibiting costly force modernization programs. On the contrary, if current arsenals are greatly reduced, it will be essential that the weapons remaining be highly reliable, capable of sustained high alert rates, and effective against a wide range of targets. One of START's major potential contributions, then, can be to ensure that the deployment of new strategic weapons will be carried out in replacement of possibly larger numbers of older systems rather than in addition to them.

A sense of the overall magnitudes of several alternative future force balances can be gained from Fig. 1, which compares the levels of strategic forces currently deployed by both sides (measured in weapons) with *alternative* estimated levels in the mid- to late 1990s. By the second half of the next decade, in the absence of arms control constraints, the Soviet Union could readily proceed with new deployments that would almost double the number of nuclear weapons deployed on strategic offensive systems, increasing its arsenal from just under 10,000 weapons today to around 18,000.[2] Even assuming continued compliance by both sides with SALT II limits, Soviet forces would probably grow to around 13,000–14,000 weapons.

A new agreement along the lines of any of the three START proposals currently on the table would mandate substantially smaller forces in the neighborhood of 6000–9000 weapons (shown by the shaded area in Fig. 1). START, then, for the first time offers the prospect of reducing future forces rather dramatically, at least regarding the levels projected in the absence of arms control.

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[2]Estimates regarding the size and composition of 1990s Soviet strategic forces in the presence and absence of arms control are notional and consistent with those found in Robert M. Gates and Lawrence K. Gershwin, "Soviet Strategic Force Developments," Testimony before a Joint Session of the Subcommittee on Strategic and Theater Nuclear Forces of the Senate Armed Services Committee and the Defense Subcommittee of the Senate Committee on Appropriations, June 26, 1985. Estimated U.S. force levels are based on data in Congressional Budget Office, *Modernizing U.S. Strategic Forces: The Administration's Program and Alternatives*, Appendix B, May 1983. See Appendix A for a detailed summary of U.S. and Soviet force modernization plans and trends.

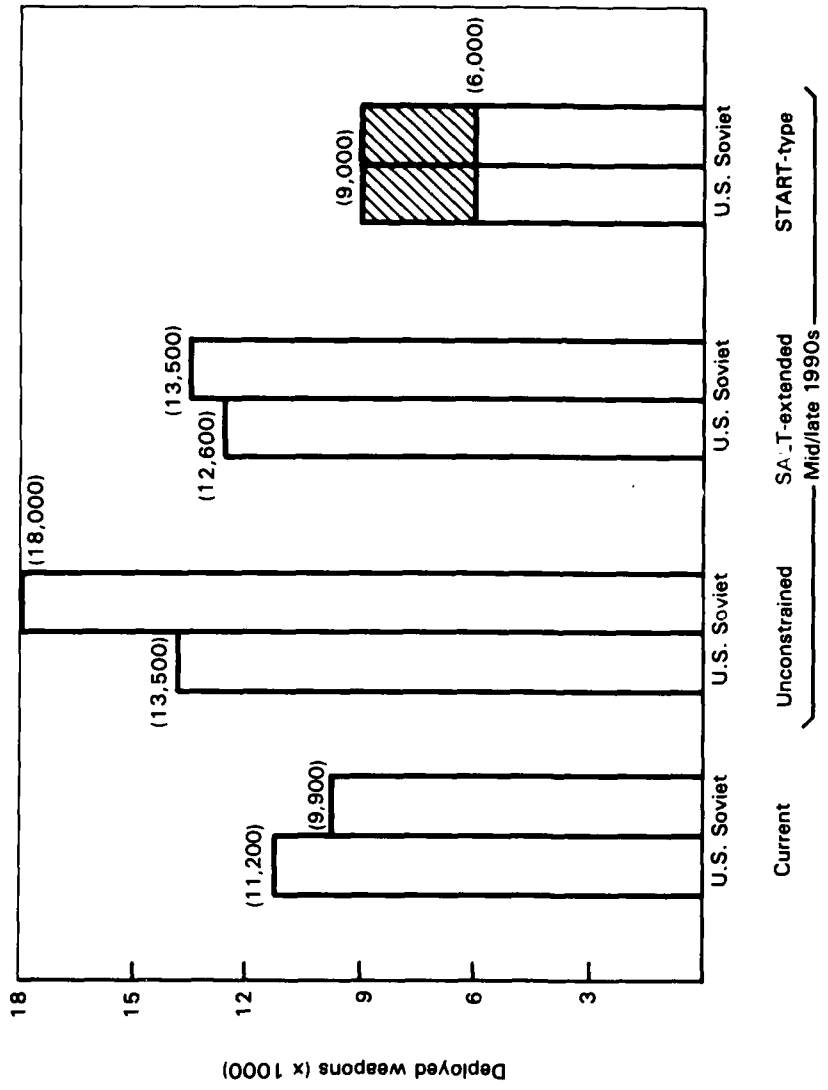

Fig. 1—Estimated alternative force levels

Proposals

The START proposal put forward by the Soviets in October 1985 called for 50 percent reductions in strategic nuclear "charges," or warheads and bombs.[3] In the context of this proposal, Moscow defined "strategic forces" as including all nuclear forces capable of striking the territory of the other side. This was a reversion by the Soviets to an earlier one-sided definition of "strategic" forces that they had unsuccessfully proposed during the early stages of both the SALT I and SALT II negotiations in the late 1960s and 1970s, but had not resurfaced during the INF and START negotiations with the Reagan administration in the 1980s.[4]

According to this Soviet definition of "strategic" forces, the United States would have to reduce not only its intercontinental range "central" strategic ICBMs, SLBMs, and heavy bombers that were limited in the SALT II Treaty, but also its INF missiles deployed in Western Europe, and its nuclear-capable fighter-bombers in Europe and Asia, as well as on all U.S. aircraft carriers, no matter where deployed. The Soviet Union, in contrast, would have to reduce only its intercontinental range nuclear forces since none of its far larger inventory of intermediate-range missile, bombers, and nuclear-capable fighter-bombers is able to reach U.S. territory. This approach would require the Soviet Union to reduce its intercontinental launchers from 2520 to 1260 but would leave unaffected its entire intermediate range force estimated at around 2500 missiles, medium-bombers, and fighter-bombers. The United States, however, would be obliged to cut its arsenal of "strategic" nuclear weapon carriers from 3360 to 1680, a ceiling under which both intercontinental and intermediate-range U.S. nuclear delivery vehicles would have to be reduced.[5]

In an important new departure, the Soviets also called for establishment of a "force concentration" rule that would permit no more than 60 percent of the 6000 permitted "strategic" weapons—that is, 3600 weapons—to be carried on a single force element, ICBMs, SLBMs, or heavy bombers. The most important effect of this rule would be to prevent the Soviets from protecting their ICBM weapons against substantial reduction by concentrating the cuts on less capable elements of their strategic force.

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[3]See George P. Shultz, "Address before the North Atlantic Assembly," San Francisco, 14 October 1985; and Paul Nitze, "Negotiations on Nuclear and Space Arms Control," Current Policy No. 807, U.S. Department of State, Bureau of Public Affairs, Washington, D.C., March 13, 1986.

[4]This and other START proposals tabled through June 1986 are summarized in Fig. 2.

[5]*Soviet Military Power*, Department of Defense, March 1986; and *The Military Balance—1985-1986*, IISS, London, Autumn 1985.

The Soviet October 1985 proposal also called for a ban on the testing and deployment of "new" strategic offensive systems, defined as ballistic missiles and aircraft that had not yet entered flight testing. It also included a ban on all long-range cruise missiles. The first ban would permit the Soviets to proceed with their next generation ICBMs, SLBMs, and bombers, which have already been flight-tested, while probably precluding U.S. testing and deployment of the "Midgetman" ICBM, the D-5 SLBM, and the advanced technology ("stealth") bomber, which have not yet been flight-tested. The second ban is apparently intended to halt and even reverse deployments of long-range ALCMs, SLCMs, and GLCMs, although the United States has already deployed all three types, whereas the USSR has fielded one class of ALCMs and has substantial development and testing efforts under way in the other two areas as well.

Again, the Soviet offer, which apparently remains on the table despite the submission of a new, less ambitious proposal in June 1986, is conditioned on U.S. acceptance of a "ban on the development (including scientific research) of space strike weapons."

The United States tabled its counter to this proposal in November of 1985, just three weeks before the Reagan-Gorbachev summit meeting in Geneva. The U.S. proposal sought to build on what the administration viewed as the positive elements of the Soviet proposal, its acceptance of weapons ("charges") as well as launchers as a unit of account for arms control, provisions for substantial reductions in weapons, and use of a force concentration rule that would guarantee sizable cuts in the Soviet ICBM force. The U.S. response rejected the Soviet definition of strategic forces, as well as their calls for a ban on new strategic offensive systems and long-range cruise missiles.[6]

The U.S. proposal, though it also included a limit of 6000 warheads on selected strategic weapons, would permit both sides to field substantially larger intercontinental strategic forces. The 6000 ceiling in the U.S. proposal applies only to missile-carried weapons; each side could deploy up to 4500 ICBM and SLBM warheads and 1500 ALCM warheads. But both sides could also deploy an additional large number of short-range attack missiles (SRAMs) and gravity bombs on the 350 heavy bombers that were permitted in the U.S. proposal, which placed no explicit limit on the number of weapons to be carried on those bombers. But one could reasonably calculate that 75 of these bombers might be loaded with 20 ALCMs each to reach the 1500 ALCM limit, while the remaining 275 bombers could carry a load of eight to ten and possibly as many as 12 SRAMs or gravity bombs or both, a payload

[6]See Paul Nitze, "Negotiations on Nuclear and Space Arms Control," March 13, 1986.

that conforms with operational considerations.[7] When added to the 4500 ballistic missile warheads allowed, this bomber loading of 1500 ALCMs and 2200–3300 SRAMs and gravity bombs would produce an effective overall strategic weapons ceiling of 8200–9300 weapons.

The much wider latitude for bomber weapons provided for by the U.S. proposal reflects both the strong American heavy bomber tradition and the position that weapons carried by U.S. bombers, which are much slower than ballistic missiles and must penetrate heavy Soviet air defenses, cannot be equated with the prompt, hard-target-killing warheads carried by heavy Soviet ICBMs against which there is as yet no defense. The Soviets, up through the summer of 1986, have objected strongly to the treatment of bomber weapons in the U.S. proposal. They have argued that under a sharply reduced ceiling for aggregate weapons, such a large U.S. advantage in "exempt" bomber weapons would be intolerable.

Eight months after the announcement of their "6000" proposal, the Soviets unveiled a new "interim" proposal that seemed, in several ways, to come somewhat closer to the U.S. position.[8] First, the earlier Soviet definition of strategic systems as including U.S. forward-based fighter-bombers was dropped. As with the SALT accords, only central strategic systems would be counted. Second, the overall weapons total in the new Soviet proposal was raised to 8000—a figure much closer to that associated with the U.S. proposal. Third, long-range ALCMs and SLCMs would not be banned under the new Soviet proposal. Both would be counted against the aggregate 8000 ceiling. The only restriction on SLCMs would be that they could be deployed only on designated classes of submarines and not on surface ships.

Perhaps more important, the Soviets backed off of their maximalist position regarding "space strike weapons," tying to their new proposal on offensive reductions a defensive regime closer to that embodied in the current ABM Treaty. They proposed that both sides agree not to withdraw from a "tightened" ABM Treaty for a period of 15 to 20 years. (One Soviet representative in Geneva reportedly hinted that a ten-year period might be acceptable.) And, although all the details of the Soviet offer have not yet been made public, they made it clear that they were prepared to accede to laboratory research on space-based BMD technologies. While continuing to seek a ban on ASAT weapons, they have apparently indicated a willingness to forgo this prohibition in the context of the higher limit on central strategic weapons and continued U.S. adherence to the ABM Treaty for an extended period.

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[7] *The Military Balance—1985-1986*, IISS, London, Autumn 1985. See also Ray Bonds (ed.), *The U.S. War Machine*, Crown Publishers, Inc., New York, 1983.

[8] See Michael Gordon, "Moscow Said to Signal Willingness to Work on Arms Pact Verification," *The New York Times*, 22 June 1986, p. 14.

In at least one important respect, however, the new Soviet proposal represented a step backward. By retaining a force concentration rule of 60 percent and raising the overall weapons ceiling, the Soviet ICBM force could be as large as 4800 weapons under the new proposal, rather than 3600 under the October 1985 Soviet proposal, and 3000 under the U.S. November 1985 proposal. This could allow Moscow to retain all of its large silo-based SS-18 missiles, while deploying a sizable number of mobile SS-24 and SS-25 missiles as well. Consequently, the reduction in Soviet ballistic missile throwweight would be substantially less than that produced by the more ambitious October 1985 offer.

Additionally, the Soviet proposal continued in effect to equate bomber weapons with ballistic missile weapons, a position that the United States had opposed in principle.

In announcing its new proposal, Moscow stressed its interim nature. If the Americans could not stomach severe restrictions on space-based weapons research in exchange for radical reductions in offensive weapons, they seemed to say, perhaps they will find a package of less stringent measures in both areas more attractive. In any case, their earlier offer remained on the table.

The Shape of a START Compromise

Can a START agreement be crafted that, along with an agreement on defense/space weapons, would serve the interests of both sides by means of a "grand compromise"? On the offensive side, such an agreement would have to meet the most important force requirements of both sides while preserving the principles of substantial reductions in weapons and throwweight and contributing to the maintenance of first-strike stability. On the defensive side, to have any chance of being accepted by the Reagan administration, it would have to permit SDI research to continue in a vigorous way. At the same time, it would have to provide Moscow with some breathing space, probably extending into the mid- to late 1990s, before the United States would be permitted to commence field testing or deployments of ABM systems or components in space. Figure 2 summarizes U.S. and Soviet START proposals current in July 1986.

Figure 3 illustrates a range of conceivable START outcomes. In these "modified" U.S. and Soviet proposals, the quantitative provisions of the Soviet and U.S. proposals have been retained. The qualitative elements (e.g., inclusion of FBS in the U.S. strategic inventory, bans on long-range cruise missiles and mobile ICBMs) have been dropped. Also shown is a potential compromise agreement (Case D) that more or less splits the difference between the newest Soviet proposal and the current U.S. proposal.

USSR Oct. 85	U.S. Nov. 85	USSR June 86
• 6000 "nuclear charges"	• 6000 RVs and ALCMs ≤4500 ballistic missile RVs ≤3000 ICBM RVs ≤1500 ALCMs	• 8000 "nuclear charges"
• 60% force concentration — 3600 wpns. on a single force element		• 60% force concentration — 4800 wpns. on a single force element
• U.S. FBS included in U.S. strategic inventory	• 350 bombers — 75 ALCM bombers — 200 non-ALCM*	• SLCMs and bomber weapons must fit within in the 8000 aggregate ceiling
• Ban on new systems (D-5, ATB, SICBM) and long-range cruise missiles (ALCM, GLCM, SLCM)	• Ban mobile ICBMs • SLCMs not included • 50% reduction in Soviet ballistic missile thrwt.	• No long-range SLCMs on surface ships
Up to 6000 weapons **2.5-3.2 Mkg BM Thrwt.	** Up to 9300 weapons 2.2-2.7 Mkg BM Thrwt.	Up to 8000 weapons **3.4-4.5 Mkg BM Thrwt.

* Bombs and SRAMs not specifically limited.

** Thwt. and/or total wpns. not specified in all proposals.

Fig. 2—Proposals for limitations on U.S. and Soviet central strategic systems

CASE A: Modified Soviet proposal (October 1985)

- 6000 ICBM & SLBM RVs + weapons on heavy bombers
  No inclusion of U.S. FBS/INF in U.S. strategic inventory
  ≤ 3600 weapons on a single component
- 6000 total weapons (2.5-3.2 Mkg of BM TWt)

CASE B: Modified U.S. proposal

- 6000 ICBM & SLBM RVs + ALCMs
  ≤ 3000 ICBM RVs
  ≤ 4500 ICBM + SLBM RVs
  ≤ 1500 ALCMs
- 350 heavy bombers
  (75 w/20 ALCMs each)
  (275 w/10 bombs/SRAMs each)
  (approx. 9000 total weapons/2.2-2.7 Mkg of BM TWt)

CASE C: Modified Soviet proposal (June 1986)

- 8000 RVs + weapons on heavy bombers + SLCM
  ≤ 4800 ICBM RVs
- 8000 total weapons (3.4-4.5 Mkg of BM TWt)

CASE D: Split-the-difference compromise

- 6500 ICBM + SLBM RVs + ALCMs
  ≤ 4000 ICBM RVs
  ≤ 200 modern, heavy ICBMs
- 275 heavy bombers
  (75 to 100 w/15 to 20 ALCMs each)
  (175 to 200 w/10 bombs/SRAMs each)
- (8250 to 8500 total weapons/2.7-3.6 Mkg BM TWt)

Fig. 3—Alternative outcomes in START

This compromise would allow the Soviets to retain 4000 ICBM RVs, considerably more than the 3000 specified in the U.S. proposal, but about an equal number fewer than the 4800 allowed for in the new Soviet offer. To reduce overall Soviet ballistic missile throwweight potential in the face of this somewhat permissive limit on ICBM RVs, this compromise would include a subceiling of no more than 2000 of these RVs allowed on SS-18-class heavy ICBMs. The principle of holding bombs and SRAMs apart from the missile ceiling is retained from the U.S. proposal, but the number of bombers permitted is reduced from 350 to 275. Long-range nuclear-armed SLCMs are not included under numerical ceilings.

Given reasonable assumptions about Soviet force structure under this compromise agreement, their ballistic missile throwweight would be reduced to between 2.7 and 3.2 million kilograms. A graph illustrating this and other effects of such an agreement on both sides' forces is shown in Fig. 4. Possible force structures complying with the agreement are shown in Table 1. In comparison with both current and projected forces, a compromise along these lines would pass the test of imposing useful reductions in strategic weapons and throwweight. It would also permit comprehensive modernization programs to continue on both sides, while forcing the retirement of many older systems and capping the number of new weapons deployed.

Assessing First-Strike Stability

The probable degree of first-strike stability existing under a compromise START agreement can be assessed using the "drawdown curves" in Figs. 5 and 6. Using likely mid- to late 1990s force structures under the postulated START compromise agreement, these curves show the locus of points in both sides' inventories of weapons that would be expected to exist following a first strike by either side. That is, they show the exchange ratio a potential attacker would face in "spending" his weapons to attack those of his opponent. To show the worst case from a stability standpoint, a "bolt from the blue" attack is assumed, wherein the attacker covertly generates a sizable portion of his forces, while the attacked side remains in a day-to-day alert posture.

This analysis shows that, given expected modernization measures, sizable portions of both sides' forces will remain invulnerable to a would-be disarming first strike, even using worst-case assumptions about force generation and execution. In the case of a Soviet first strike (Fig. 5), when all of his appropriate and available weapons were used, more than 3500 weapons would remain on U.S. submarines at

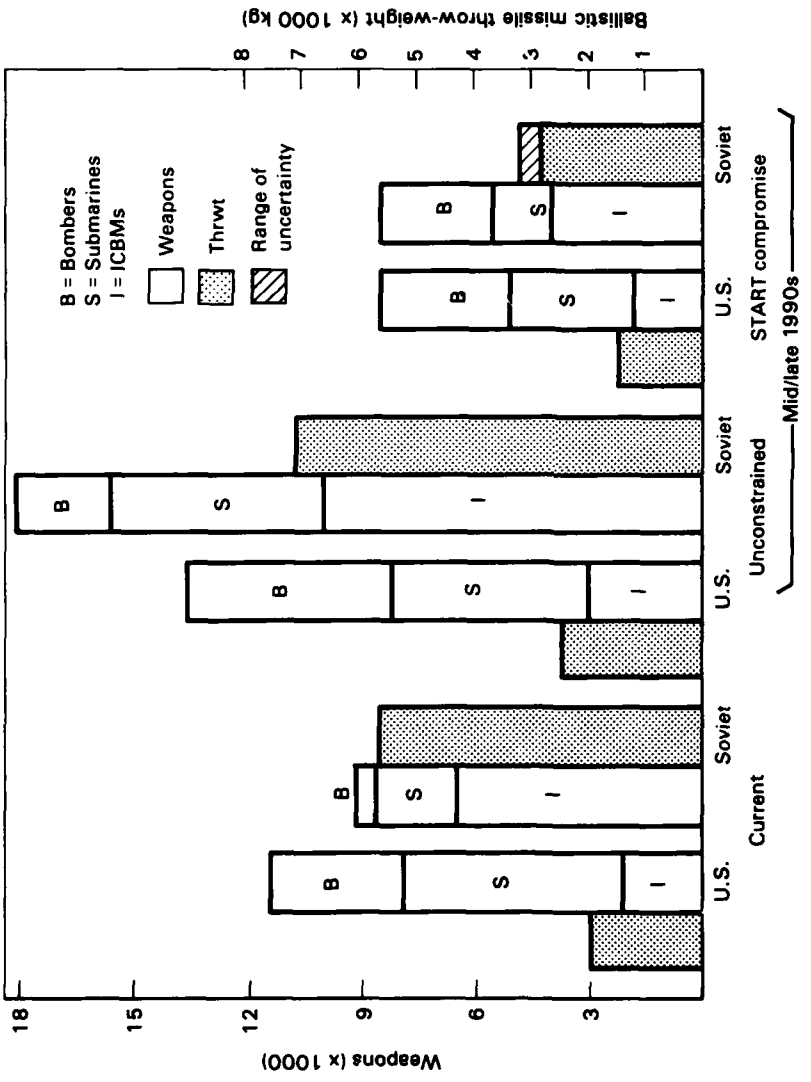

Fig. 4—Effect of possible START compromise

Table 1

POSSIBLE FORCE STRUCTURES UNDER A START COMPROMISE AGREEMENT[a]
(Mid- to late 1990s)

	Launchers		Weapons	Throwweight (MKg)
	501	SICBM	501	.23
United	50	M-X	500	.18
States	245	Minuteman III	735	.27
	408	D-5 SLBM	3264	1.0
	(17	Trident II boats)		
	75	B-1B w/ALCM	1500	
			6500	
	25	B-1B w/SRAM/Gravity	250	
	175	ATB w/SRAM/Gravity	1750	
Total	1529		8500	1.68
	200	SS-18FO	2000	2.0
Soviet	150	SS-24	1500	.5
Union	480	SS-25	480	.4
	120	SS-N-20 (6 boats)	1080	.25
	48	SS-N-23 (3 boats)	480	.1
	80	Bear H w/ALCM	960	
			6500	
	195	Blackjack w/o ALCM	1950	
Total	1273		8450	3.25

[a]Ballistic missile throwweight figures are largely taken from *The Military Balance 1985-86,* and "Modernizing U.S. Strategic Offensive Forces; The Administration's Program and Alternatives." Throwweight of the SS-18 FO is notional and based on reports the Soviets are developing a new silo-based heavy ICBM (see Gates and Gershwin, 1985, p. 2). SS-N-20 and SS-N-23 throwweights are approximations based on information contained in *Soviet Military Power* Department of Defense (March 1986) and the CBO Report cited in Footnote 2 above.

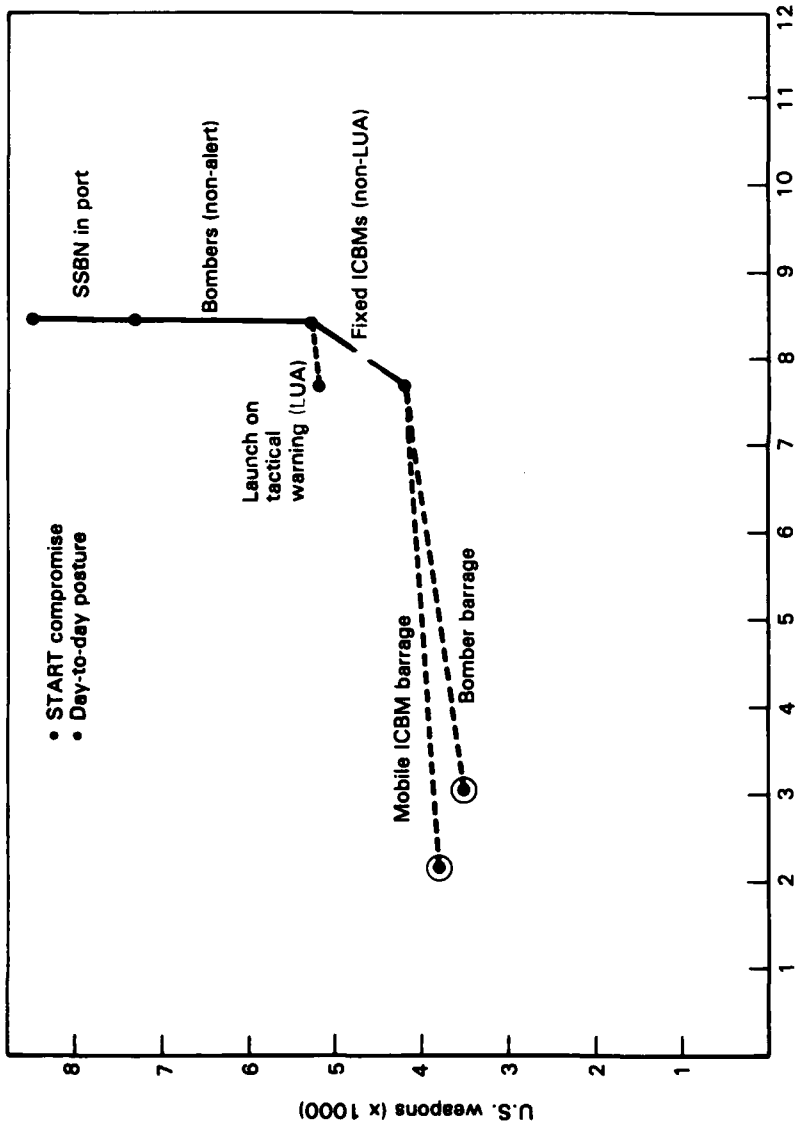

Fig. 5—Survivability of constrained U.S. strategic forces (mid- to late 1990s)

sea, alert bombers that had successfully escaped from their bases, and mobile land-based ICBM launchers. If the United States chose to launch its silo-based ICBMs upon receipt of tactical warning that the Soviet attack was under way—an eventuality no Soviet planner could reasonably exclude—more than 1100 additional weapons would be available for retaliation.

A hypothetical U.S. first strike (Fig. 6) could destroy some 6600 out of 8450 Soviet weapons if their silo-based ICBMs rode out the attack and if their bomber force were held to a modest 20 percent alert rate. (The Soviets have never to date placed any of their modest heavy bomber force on strip alert, even in deep political crises.)[9] Given a Soviet decision to launch their silo-based ICBMs on tactical warning and a bomber alert rate equal to that planned for the B-1 (40 percent),[10] approximately 4000 Soviet weapons could be expected to survive a U.S. first strike.

The incentives either side might face to undertake a disarming first strike appear minimal under this compromise START agreement. Moreover, by constraining the growth on both sides of weapons and ballistic missile throwweight, such an agreement would help ensure the long-term viability of efforts to increase force survivability by precluding large-scale barrage attacks against alert bombers, mobile ICBMs, and SSBNs at sea. The overall effect of START reductions on total U.S. force survivability is summarized in Fig. 7. It shows that START would provide a substantial hedge against a possible Soviet breakthrough in antisubmarine warfare (ASW) technology, air defense against bombers, or mobile missile localization, any of which might allow them to neutralize a portion of our Triad at reasonable expense and allow them to direct their barrage capability to the remainder of the force.

DEFENSE/SPACE

Whatever progress may be achieved in finding an acceptable compromise on limits in central strategic systems, there is little prospect for a signed agreement in this area unless the two sides can also find a way to address what has become the overarching Soviet concern: the future of the American SDI program. Moreover, as was noted

[9]Robert P. Berman and John C. Baker, *Soviet Strategic Forces Requirements and Responses*, The Brookings Institution, Washington, D.C., 1982, p. 36. See also Steven M. Meyer, "Soviet Nuclear Operations and Command and Control," April 1986, in Ashton Carter, John Steinbrunner, and Charles Zraket (eds.), *Nuclear Operations Command and Control*, The Brookings Institution (forthcoming).

[10]CBO, *Modernizing U.S. Strategic Forces*, 1983, p. 104.

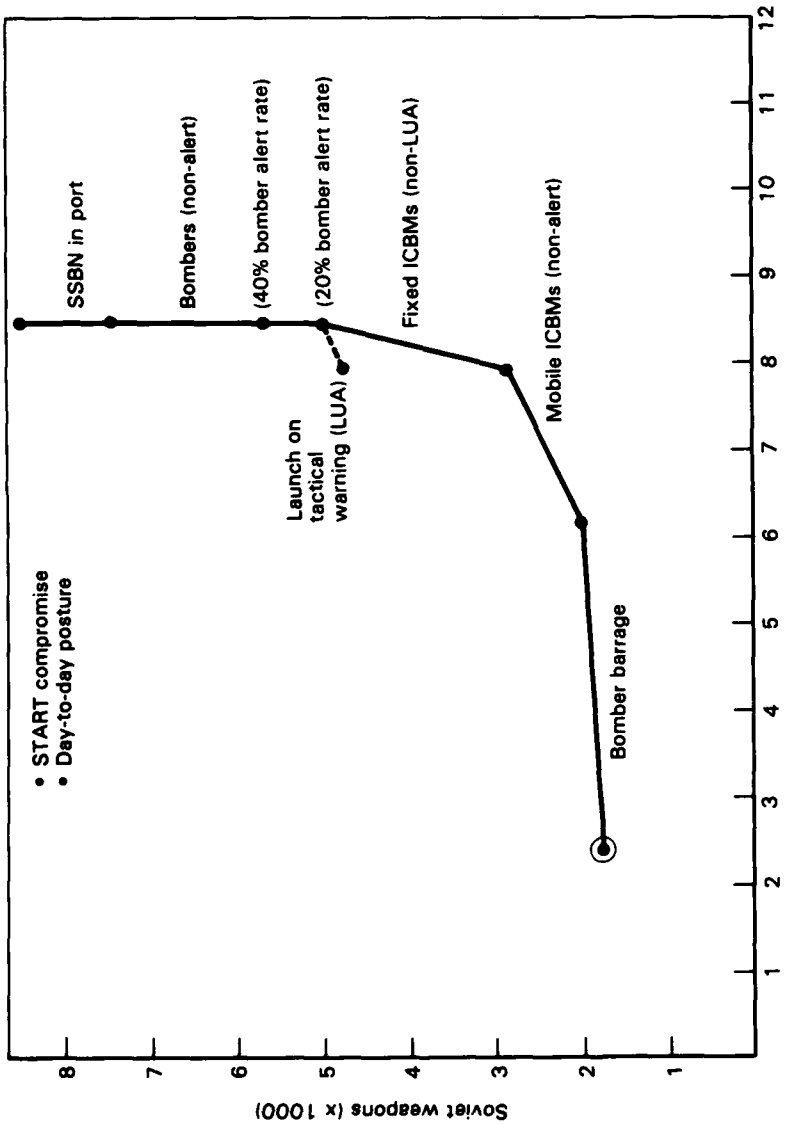

Fig. 6—Survivability of constrained Soviet strategic forces (mid- to late 1990s)

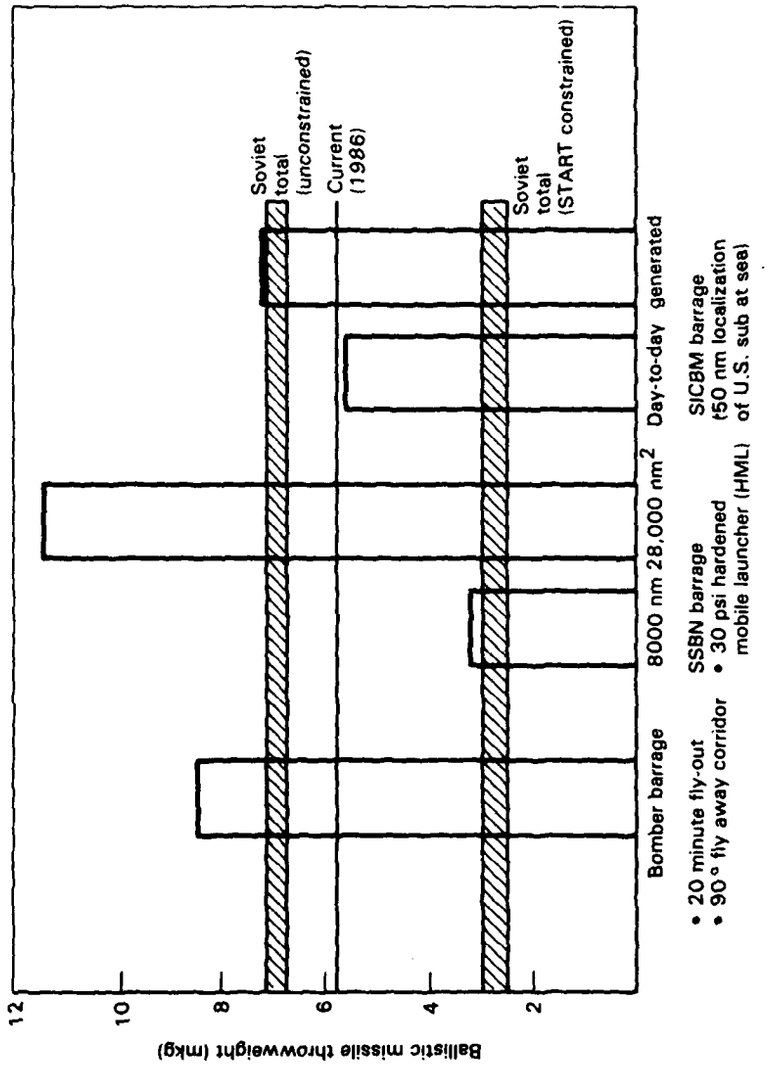

Fig. 7—Throwweight requirements for barrage (mid 1990s)

above, SDI highlights for the Soviets the still-vague but nonetheless menacing prospect of superior U.S. technology being harnessed in a determined effort to re-shape the strategic balance. As the Soviet leadership doubtless recognizes, even if they at some point in the future kept pace with the United States in a costly and protracted defensive arms race, both sides might find themselves at the end of this period substantially less secure than when they began.

Because of the differences in the two sides' technological approaches to ballistic missile defense (BMD), it may be useful to review briefly recent developments in their strategic defense programs before examining their negotiating positions.

U.S. BMD Systems and Development Efforts

The United States, of course, has no operational ABM system. Deployed U.S. systems with potential application to assist in the operation of a new multilayered BMD system are, with two exceptions, limited to launch detection and attack assessment. These systems include:

- Satellites to detect the launch of Soviet and Chinese ICBMs and SLBMs in early stages of flight after they have been launched from silos, mobile land-based launchers, or missile submarines. A new generation of such satellites is under development.
- Since the 1960s, the United States has deployed large ballistic missile early warning system (BMEWS) radars at three sites in Alaska, Greenland, and England. These would provide warning of ICBM and, perhaps, some SLBM attacks independent of launch detector satellites and within a few minutes of launch. Construction is underway at the Thule, Greenland and the Fylingdales, Britain sites on new facilities to replace the existing radars. The new equipment will include modern phased-array radar sets.
- Shorter range, large phased-array radars (LPAR), called Pave Paws, are being deployed at several sites in the United States. Two are now operational (in Massachusetts and California), with two more (in Georgia and Texas) under construction. Once complete, the Pave Paws radar network would detect SLBM launches from all approaches not covered by the BMEWS sites.
- The perimeter acquisition radar characterization system (PARCS), built in the early 1970s as part of the ABM site deployed at Grand Forks Air Force Base in North Dakota, is

still operational. Although constructed as an ABM target acquisition radar, it would provide attack confirmation and assessment data to commanders in the event of a ballistic missile attack against areas of the north central United States.

- The Patriot surface-to-air missile system, while designed for defense against aircraft, and being deployed with U.S. theater forces in Western Europe and Korea, is of relevance as well. The range and altitude capabilities of the Patriot missile are said to give the system some inherent potential capabilities against at least tactical ballistic missiles, given appropriate electronics upgrades. Part of SDI's research efforts are devoted to ATBM technologies. Should the United States and its NATO partners choose to develop an ATBM system, it is as yet unclear whether they would use Patriot as its basis or develop a new system.
- Finally, the U.S. ASAT program is a factor in the Defense and Space Talks in Geneva. The Soviet definition of space strike weapons, on which they seek a total ban, includes ASAT weapons. In addition, the air-launched miniature vehicle (MV) warhead used in the U.S. ASAT system currently under development incorporates technologies that have inherent applications in BMD. This particular program is in some difficulty, in part for cost and technical reasons, but primarily because of controversy over the wisdom of deploying an ASAT system before the arms control prospects for ASATs are clarified. In any case, it should be remembered that technologies applied to development of an ASAT capability—be they based on directed or kinetic energy—can be quite closely related to the development of a BMD capability. During flight, a strategic ballistic missile warhead can, after all, be thought of as a satellite, part of whose orbit intersects with the earth.

Soviet BMD Systems and Developments Efforts

Over the past 15 years the Soviets have continued to improve their modest capabilities to defend against ballistic missiles. They have continued a vigorous research and development effort in "traditional" ground-based interceptors designed to attack enemy reentry vehicles just before and after their reentering the atmosphere during the terminal phase of their flight to target. These efforts have produced a new generation of ABM-related systems. This includes silo-based interceptor missiles—the high altitude modified Galosh and rapid acceleration Gazelle—and a large phased-array tracking-engagement radar at

Pushkino. These improvements to the ABM system around Moscow are permitted under the ABM Treaty.

For the past ten years or so, the Soviets have also been flight-testing radar and interceptor components for the so-called ABM-X-3 system. Western analysts estimate that this system could be emplaced to provide terminal defenses for selected regions within a matter of several months. Such a deployment would, of course, represent a direct violation or "breakout" of the ABM Treaty.

U.S. fears of such a breakout or a more gradual "creepout" beyond ABM Treaty restrictions have been increased by two other developments: (1) Soviet construction during the 1980s of nine new LPARs for ballistic missile detection and tracking; and (2) the development of a new generation mobile SAM, the SA-X-12, which has been tested against both aircraft and shorter range ballistic missiles. Eight of the nine new LPARs are located along the periphery of the USSR and oriented outward, indicating that they are probably intended primarily as a means to provide early warning and attack assessment against an enemy ballistic missile attack. The ninth radar, currently under construction at Abalakovo near Krasnoyarsk in south central Siberia, appears to be oriented to the northeast across some 4000 kilometers of Soviet territory. Although the Soviets claim the radar is intended solely for tracking satellites in space, its similarity to the other LPARs is such that it represents a clear violation of the ABM Treaty.[11]

Flight-testing of the mobile SA-X-12 surface-to-air missile against either tactical ballistic or medium-range ballistic missiles raises no questions regarding Soviet compliance with the ABM Treaty since its provisions pertain only to defense against long-range "strategic" missiles. In the view of some, however, the SA-X-12 and possibly the SA-10 could be tied in with the improved nationwide radar tracking network and, along with the rapidly deployable ABM-X-3, could provide terminal ballistic missile defense coverage for high priority military and industrial regions. Such a system could be operational within the next several years. Deployments of this combination plus possible expansion of the upgraded ABM system around Moscow represent the primary options for any large-scale Soviet BMD deployments until the end of the century.

In addition to their development of traditional ABM systems and possible "SAM upgrade" supplements to these systems, the Soviets have been exploring more exotic technologies with potential BMD applications for many years. Over the past two decades they have

[11]The treaty stipulates that ballistic missile early warning and tracking radars must be located on the periphery of the United States or Soviet territory and oriented outward in order to limit the potential ABM battle management role for such radars.

performed fundamental and applied research on several high energy lasers with possible applications as air and missile defense or antisatellite weapons, on particle beam weapons, and on hypervelocity kinetic-energy weapons.[12] U.S. intelligence estimates that these efforts could produce

- Testing of a prototype high-energy, space-based laser ASAT weapon, operating in low orbit in the early 1990s
- Testing of fixed, ground-based, high-energy laser weapons for terminal defense against ballistic missile reentry vehicles from existing facilities at Saryshagan in the late 1980s and 1990s. Deployment of such a system could probably not occur until after the year 2000
- Testing and initial deployment of space-based particle beam weapons capable of destroying satellites by the mid- to late 1990s with a space-based beam weapon capable of destroying missile boosters or warheads not available for testing for several more years
- Testing of long-range, space-based kinetic-energy systems for defense against ballistic missiles might occur as early as the mid-1990s but would probably begin even later.[13]

Positions in Geneva

Since 1983 Soviets have been demanding a ban on all activities, including "scientific research," that are part of a military R&D program dedicated to the possible deployment of space-based strategic ballistic missile defense. This position remains formally part of the Soviets "6000" proposal tabled in October 1985. Their approach would ban virtually all U.S. strategic defense activities that have been organized under the SDI program, many of which, in fact, predated that program and to which the Soviets had previously raised no objection. At the same time the Soviet position would sanction all ongoing Soviet research, including research with potential SDI-like applications, because there is no public record documenting any Soviet intent to explore, test, or deploy defensive systems that would violate the ABM Treaty.

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[12]*Soviet Strategic Defense Programs*, U.S. Department of Defense and Department of State, October 1985.

[13]Ibid., pp. 12–16. See also "Soviet Strategic Force Developments," Testimony of Robert M. Gates and Lawrence K. Gershwin, CIA, before a joint session of subcommittees of the Senate Armed Services and Appropriations Committees, June 26, 1985, p. 8.

As there are fundamental differences between the way the United States conducts its military R&D and weapons development processes within the constraints of the American constitutional system and the politically unconstrained and secretive manner in which the USSR conducts these activities, the banning of research on the criterion of unverifiable "intentionality" could involve a double standard that would penalize the United States for its open political process and reward the Soviet Union for its closed system. On these grounds alone the Soviet position is unacceptable to the United States.

The Soviets undoubtedly recognize this and thus have put forth a more palatable proposal as part of their June 1986 "8000" package. They propose that both sides agree not to withdraw from the ABM Treaty for a period of 10–15 years. Moreover, they have loosened their definition of what the treaty bans in terms of research and development on space-based BMD systems. They now seem to propose that laboratory research on technologies or subsystems relevant to space-based BMD is permissible, but that field testing, development, and deployment of such technologies are banned under the ABM Treaty. This represents a step forward in that it attempts to draw a clear line between permitted research and forbidden development activities—a line that, in principle, can be verified according to objective criteria applicable equally to both sides and with the use of national technical means.

The United States takes the position that any limitations on SDI research beyond those already included in the ABM Treaty would be both premature and unnecessary. In this view the promise of effective ballistic missile defense, no matter how distant or remote, is potentially so important that the long-term option for developing and deploying such defenses must be protected from any limitation.

It is apparent, however, that important differences have arisen since 1983 between American and Soviet interpretations of precisely how the ABM Treaty applies to space-based technologies. And during 1985 the U.S. view of these matters became increasingly unclear. Senior officials announced that according to a new official U.S. reinterpretation of the ABM Treaty, the treaty is now regarded as permitting all research, development, and testing activities short of actual deployment of ABM systems based on "other physical principles" in any basing configuration. (One official stated that even deployment was permitted.) Although the Reagan administration subsequently announced that for the time being the United States would abide by a "strict" interpretation of the treaty that would continue to ban the development and deployment of space-based "exotic" ABM system components, the interpretive waters have now become so muddied that

mere reaffirmation of the ABM Treaty without clarification regarding precisely which interpretation of the treaty would apply would not help much to resolve U.S.-Soviet differences.

A series of clarifications or agreed interpretations of the ABM Treaty is necessary if a grand compromise is to be struck. These relate to such matters as what constitutes verifiable "development" of ABM "components" and what precisely is a "component" in a high technology ballistic missile defense system. In addition, both sides probably would have to agree on a minimum time frame for continued adherence to the treaty. Ten years is probably the shortest period the Soviets are prepared to sign up to, since technical challenges and tightening funding constraints seem increasingly to preclude U.S. development or deployment of capable space-based BMD systems before the mid-1990s in any case. A U.S.-Soviet agreement that both shall continue to adhere to a traditional, more restrictive interpretation of the ABM Treaty for possibly ten years thus appears to represent the most likely compromise. Such an agreement would meet Mr. Gorbachev's minimum requirement for assurance that the United States would not soon be moving rapidly toward the flight-testing and possible deployment of an extensive BMD system and President Reagan's insistence that, despite agreed restraints on flight-testing, the United States be able to maintain a vigorous SDI research effort that could eventually serve as the basis for the deployment of a multilayered missile defense.

A second alternative, one that the Kremlin distinctly prefers, would be to conclude an agreement along the lines described above and to add to that a ban on the testing and deployment of all antisatellite systems. Such a ban would have the important effect of closing a potential loophole for the conduct of important developmental field tests of various U.S. SDI kill mechanisms otherwise permitted even under a "clarified" ABM Treaty that remained within the "narrow" interpretation of that agreement.

A final alternative would be to add a ban on the testing and deployment of anti-tactical ballistic missile (ATBM) systems to all of the restrictions discussed above. This additional restraint would eliminate another avenue of ABM development, thus reducing the potential for gradual Soviet "creepout" or more dramatic breakout from current ABM Treaty restrictions through use of the SA-10 or SA-X-12 dual-purpose air defense and anti-tactical missile systems. On the U.S. side, such an agreement would preclude exploiting the ATBM potential of the Patriot surface-to-air missile or joining with its NATO allies in any other effort to acquire an ATBM capability for NATO as a defense against Soviet nuclear and conventionally armed tactical ballistic missiles.

INF

The broad outlines of a grand compromise in the START and defense/space talks have become increasingly clear. A general basis for mutually acceptable compromise in the INF talks is less obvious. The Soviets have proposed several different compromises, all of which involve withdrawal of U.S. long-range INF missiles in Europe, retention of their longer range theater nuclear missiles in Asia, and restraints on the modernization and expansion of British and French national nuclear forces. The United States, in contrast, appears determined to maintain at least a symbolic deployment of LRINF missiles in Europe, to gain substantial reductions on Soviet SS-20s based in Asia, and to reject any limitations on British and French modernization programs. Consequently, the Soviets will be required to make substantial concessions if an agreement satisfactory to both sides is to be achieved.

The INF Balance

The starting point for the INF talks is the Soviets' very sizable superiority in numbers of deployed medium-range nuclear weapons and launchers. As Table 2 shows, Soviet numerical superiority in three categories of INF systems—long-range missiles, medium bombers, and nuclear-capable tactical fighter-bombers—extends across the board. Completion of the planned deployment of U.S. LRINF missiles in Western Europe will not substantially alter this global numerical imbalance.

Deployment of SS-20 missiles appears to have been capped at around 450 launchers (1350 weapons), about two-thirds of which are within range of Western Europe. In the summer of 1986 the U.S. force of LRINF missiles stood at 108 Pershing II (the complete P-II program) and about 32 ground-launched cruise missile launchers (128 weapons). The full GLCM force is programmed to include 116 launchers with 464 weapons, bringing the total U.S. LRINF missile deployment to 224 launchers/572 weapons.

Not surprisingly, Soviet accounting of INF weapons (at least for presentational purposes) shows a less pronounced disparity in the East-West INF balance. In fact, some Soviet calculations have managed to show parity or even Soviet inferiority in INF systems. Their count includes the nuclear deterrent forces of the UK and France, along with U.S. INF systems in the Western total. As Table 3 shows, the UK and France deploy a total of 258 weapons on missiles within range of Soviet territory. However, this number is expected to

Table 2

U.S.-SOVIET GLOBAL INF BALANCE, MARCH 1986[a]

United States			Launchers/Wpns/(Projected)
INF Missiles	Pershing II		108 / 108 (108/108)
	GLCM		32 / 128 (116/464)
		Total	140 / 236 (224/572)
		TOGW[c] x 1000 lb	A/C / Wpns
Medium Bombers[b]	FB-111	114	61 / 366
		Total	61 / 366
		TOGW x 1000 lb	A/C / Wpns
Fighter Bombers	F-111	95	250 / 750
	A-6E	60	170 / 510
	F-4E	55	440 / 440
	F/A-18	49	161 / 322
	A-7	42	288 / 1152
	F-16	36	510 / 1020
		Total	1819 / 4194
Soviet Union			
			Launchers/RVs
INF Missiles	SS-4		112 / 112
	SS-20		441 / 1323
		Total	553 / 1435
		TOGW x 1000 lb	A/C / Wpns
Medium Bombers	TU-26 Backfire	270	230 / 920
	TU-16 Badger G	159	400 / 1600
	TU-22 Blinder	185	165 / 660
		Total	795 / 3180
		TOGW x 1000 lb	A/C / Wpns
Fighter Bombers	SU-24 Fencer	87	700 / 1400
	MiG-27 Flogger D/J	44	760 / 1520
	SU-17 Fitter D/H/K	39	1000 / 2000
	SU-7 Fitter A	30	130 / 260
	MiG-21 Fishbed L	21	135 / 270
		Total	2725 / 5450

[a] U.S. and Soviet INF missile figures taken from *Soviet Military Power*, March 1986. U.S. and Soviet aircraft and aircraft weapon figures taken from *The Military Balance, 1985-1986*. Takeoff gross weights for U.S. and Soviet aircraft were taken from Jane's *All the World's Aircraft 1982-1983*, and *1985-1986*, Jane's Publishing Company Limited, London, England.

[b] Medium bombers are defined as those with takeoff gross weight greater than 100,000 lb, but less than intercontinental range.

[c] Takeoff gross weight.

grow to around 1200 by the mid-1990s, as both countries deploy new MIRVed SLBMs. By the Soviet definition of LRINF missiles, the United States, France, and UK would achieve a 1.2:1 advantage over the Soviets by the mid-1990s.

Moscow's definition is self-serving. The British and French nuclear forces are independent national deterrents, not operationally or doctrinally connected to U.S. theater forces. Moreover, these missile forces represent the total long-range nuclear delivery capability of the UK and France. They are far outnumbered compared with all Soviet systems of comparable range (see Fig. 8).

Negotiating Limits and Possibilities

Because of a series of valid but essentially political factors, most U.S. negotiating *objectives* (reviewed above) have become, through the process of alliance consultations, enshrined as matters of *principle*. For

Table 3

THIRD COUNTRY LONG-RANGE NUCLEAR FORCES,[a] MARCH 1986

		1986		Mid-1990s
M/IRBM				
		Msls/RVs		Msls/RVs
France		18/18	S-3 (silos)	18/18
			Mobile IRBM ?	34/102 ?
China	DF-2 MRBM	50/50	?	
	DF-3 IRBM	60/60	?	
SLBM		SSBNs/SLBMs/RVs		SSBNs/SLBMs/RVs
United Kingdom	Polaris	4/64/64[b]		D-5 4/64/512
France	M-20	5/80/80		
	M-4	1/16/96		M-4 6/96/576
		6/96/176		
China	HY-2	1/12/12		?

[a]Figures for 1986 French, British, and Chinese forces taken from *The Military Balance, 1985-86*.

[b]UK A-3 and Chevaline systems on Polaris missiles each carry three multiple reentry vehicles (MRVs), which are not independently targetable. Thus, both systems are treated as single warhead missiles.

better or worse, it will be very difficult for the United States to compromise on several key criteria for an INF agreement:

- Reductions to equal, global ceilings on LRINF missiles.
- No shift of the Soviet INF threat toward Asia.
- No compensation granted to Moscow for third country forces.
- No restrictions on the size of third country forces.

The United States may have some limited flexibility with regard to the first of these criteria. It has none with respect to the others. This is not meant to imply that the United States has unwisely imposed these conditions on itself. The United States must not put itself in a situation where it appears to be trading the security of some of its allies against that of others. Nor can it allow Moscow to create the appearance that Washington might be prepared to press Paris or London to restrict their nuclear programs for the sake of an agreement in Geneva. Nonetheless, the presence of these constraints on U.S. flexibility, combined with the fact that the weight of any reductions will fall more heavily on the Soviet Union than on the United States, make clear the need for Soviet flexibility in the INF forum.

It could be argued that Moscow can achieve all of its objectives by *not* having an INF reductions agreement but appearing to want one. This would not be a bad working hypothesis with which to explain Moscow's tactics in the INF talks to date. Their proposals to reduce SS-20s to a number equal to the total number of British and French missile weapons seem particularly designed to appear reasonable while fomenting discord within the NATO alliance.

Moscow must be aware that the game of continual one-upsmanship with the United States is bound to wear thin over time. Also, the Soviets clearly would prefer a situation in which very few or no new American LRINF missiles were deployed in Europe, if the price for such a deal were reasonable.

Moreover, it would be a mistake to assume that "a weapon is a weapon" and thus mechanistically equate an SS-20 RV with a GLCM or P-II warhead. For example, the Soviets might conclude (correctly in our judgment), that modern U.S. LRINF systems in Europe are more important to NATO's strategy than the SS-20s are to Moscow's. After all, the number of nontactical nuclear targets in NATO/Europe—ports, airfields, logistics sites, C^3 nodes—is not that large, amounting to no more than a couple of hundred installations. All of these targets can surely be covered by a combination of SS-12/22s, SS-23s, and a portion of the Soviet's medium bomber and tactical aviation forces. Such a calculation might prompt Moscow to accede to reductions at a ratio of

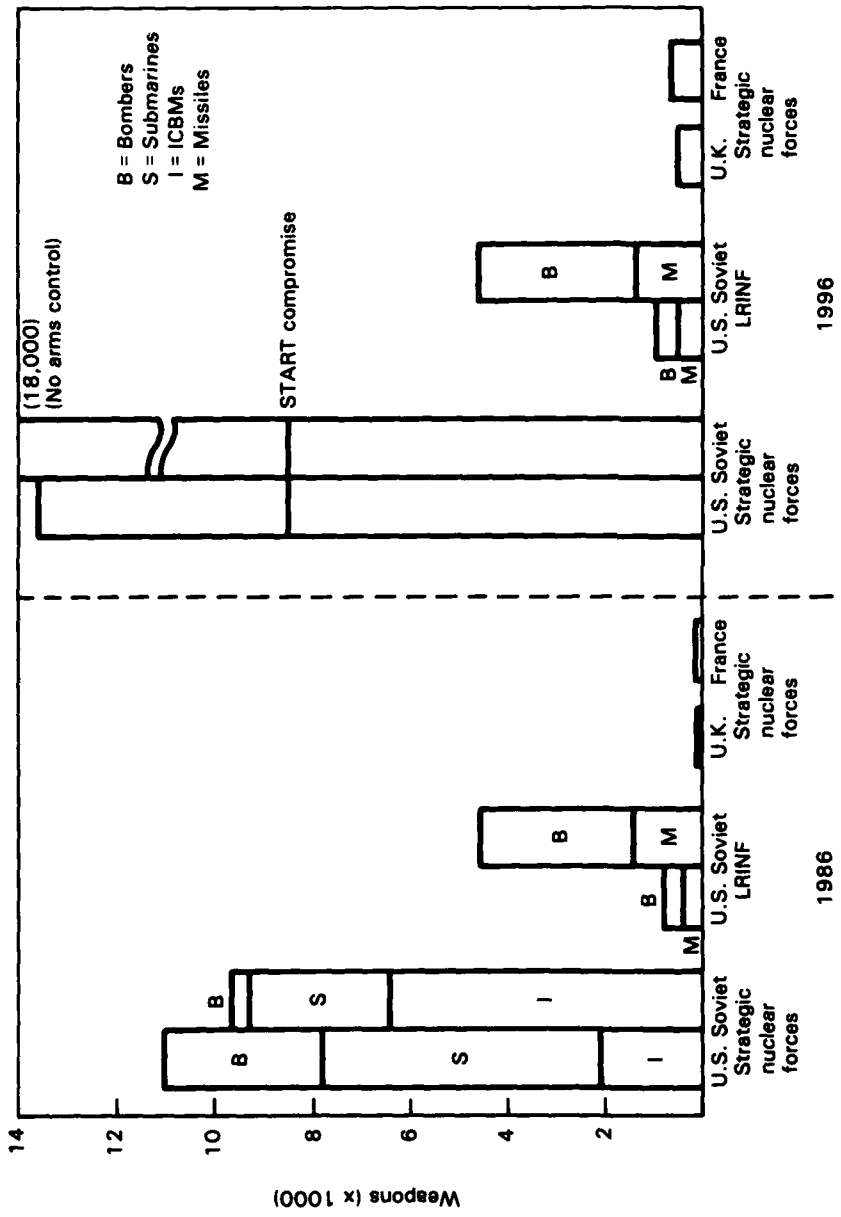

Fig. 8—Comparative strategic nuclear and LRINF force levels

3 or 4 to 1—the rate implied by Soviet and U.S. reductions to low, equal levels of LRINF worldwide. The Soviets' professed concern about the first strike potential of the P-II might add to their willingness to make such an "unequal" trade, especially if it were reduced more than proportionately (as was the case with the "Walk in the Woods" formula worked out by Ambassadors Nitze and Kvitsinsky in 1983).

Proposals

As of July 1986, the publicly available information on the two sides' proposals in Geneva was as follows:

The most current Soviet proposal, tabled in January 1986, calls for the elimination of all U.S. and Soviet LRINF missiles in Europe within five to eight years.[14] No mention was made of the future size of the SS-20 force facing Asia. Presumably, this would at least not increase in size. The Soviet proposal also stipulates that the UK and France would be required to freeze the size of their nuclear forces at current levels and that the United States would have to pledge not to transfer strategic or INF missiles to other countries (e.g., providing D-5 SLBMs as currently planned to the UK). In its basic elements, then, the current Soviet proposal is much like earlier ones: It would reduce to zero U.S. LRINF, retain a sizable SS-20 force in Asia, and freeze third country forces at their present low levels.

The current U.S. proposal, tabled in February of 1986, rejects the Soviet demand for a nontransfer pledge and makes no mention of British and French forces.[15] Refusing to concede the "moral high ground" to the Soviets, the U.S. proposal calls for phased reductions leading to the elimination of all U.S. and Soviet LRINF missiles worldwide within three years. It also calls for a freeze on shorter range INF missile systems, such as the Soviets' SS-21, SS-23, and SS-12/22. It would mandate reductions in three phases, corresponding to the first three years after ratification of an agreement.

- Phase I: 140 U.S. and Soviet launchers in Europe
  ~90 Soviet launchers in Asia
- Phase II: 70 U.S. and Soviet launchers in Europe
  44 Soviet launchers in Asia
- Phase III: Elimination of all U.S./Soviet LRINF missiles

[14]Nitze, *Negotiations on Nuclear and Space Arms Control*, March 13, 1986.
[15]Ibid.

In addition to these limits on launchers, there would be a parallel series of ceilings on LRINF missile warheads, under which the United States would retain the right to global warhead equality. Thus, U.S. systems in excess of the *launcher* limits cited above could be withdrawn to the continental United States unless or until they were also in excess of the *warhead* ceiling, in which case they would be destroyed.

These phases could and almost certainly were designed to provide grounds for reaching potential compromise agreements at the end of phases one or two. This would meet the U.S. objectives of retaining substantial PII and GLCM deployments in Western Europe while also achieving major reductions in the Soviet SS-20 forces in the European and Asian parts of the USSR.

Possible INF Outcomes

A range of possible outcomes from the INF talks is shown on Fig. 9. They include the end point of the U.S. current proposal—zero LRINF missiles—as well as outcomes similar to the intermediate stages of that proposal—more modest reductions to 70 or 140 launchers within range of Europe on each side. A fourth outcome, of course, is also possible: no formal agreement to limit deployments on INF systems while both sides conclude interlinked agreements on reducing central strategic forces and limiting U.S. SDI activities.

Implicit in Case C, the "zero solution" shown in Fig. 9, is the judgment that the Soviets will not agree to reduce their LRINF missiles to zero without some cap on British and French forces. French and (absent a Labour government coming to power) British determination to modernize and enlarge their forces appears unshakeable. The possibilty of accelerated development of strategic ballistic missile defenses by the Soviet Union increases the need for their force modernization. It thus seems unlikely that a zero solution, including constraints on British and French nuclear forces, can be achieved.

Cases A and B, which provide for considerable reductions but retention of some U.S. LRINF systems deployed in Europe, seem most attractive. In truth, many American officials and analysts, along with their European colleagues, would be satisfied with an agreement along these lines but would be quite dismayed by Soviet acceptance of the full U.S. proposal. In 1982 and 1983, as the deployment of GLCMs in the UK and P-IIs in Germany approached, NATO representatives repeatedly explained the need for these systems by underscoring their importance as a means of coupling the security of Western Europe with the central U.S. strategic deterrent. Systems like the GLCM and P-II, which strengthen coupling, are needed whether or not there are

CASE A: Modest reductions in U.S. and Soviet INF missiles

- 140 missile launchers/420 weapons for each side in range of Europe
- 100 missile launchers/300 weapons for Soviets in Asia
  - United States can maintain same number in reserve in the United States.
- Reliable U.S. verification of dismantling or destruction of excess launchers and missiles
- No restraints on British and French INF arsenals

CASE B: Deep reductions in U.S. and Soviet INF missiles

- 70 missile launchers/210 weapons for each side in range of Europe
- 50 missile launchers/150 weapons for Soviets in Asia
  - United States can maintain same number in the United States
- Reliable verification of dismantling of excess launchers and missiles
- No restraints on British and French INF arsenals

CASE C: Elimination of U.S. and Soviet INF missiles

- Zero missile launchers and weapons for each side in range of Europe
- Zero missile launchers and weapons for each side in Asia or elsewhere
- Some constraints on British or French INF arsenals

Fig. 9—Alternative outcomes in INF missile talks

any SS-20s deployed within range of Europe. This fact has been somewhat obscured by concern over the SS-20 and by enthusiasm for an appealing public position that seeks the elimination of all LRINF missiles.

Appendix A

U.S. AND SOVIET STRATEGIC OFFENSIVE FORCE DEVELOPMENTS: 1986–1996

Table A.1

U.S.-SOVIET STRATEGIC BALANCE, MARCH 1986

	United States	USSR
ICBM	1017 (550 MIRVed) 2117 RVs 1.0 MKg TWt	1396 (818 MIRVed) 6418 RVs 4.5 MKg TWt
SLBM	648/37 subs (648 MIRVed) 5760 RVs 0.9 MKg TWt	944/62 subs (300 MIRVed) 2800 RVs 0.9 MKg TWt
Bomber	263 active B-52 (98 w/ALCM) [270 inactive B-52] 3280 weapons	180 active Bear and Bison (40 w/ALCM) [+ 270 Backfire] 660 weapons [+1080 on Backfire]
Totals	1928 SNDVs [+ 270 inactive B-52] — 1665 ballistic missiles (1198 MIRVed) —263 bombers (98 w/ALCM)	2520 SNDVs [+ 270 Backfire] —2340 ballistic missiles (1154 MIRVed) —180 bombers (40 w/ALCM)
	11,157 weapons 7877 BM RVs 1.9 MKg BM TWt	9878 weapons [+ 1080 on Backfire] 9218 BM RVs 5.4 MKg BM TWt

SOURCES: Data on the number and type of delivery vehicles and ballistic missile weapons taken from *Soviet Military Power* (March 1986). U.S. bomber weapon figures based on *The Military Balance, 1985-86* (IISS) and publicly announced capacity of ALCM-equipped B-52s to carry 20 weapons. Soviet bomber weapon figures derived from *The Military Balance, 1985- 86* and *Soviet Military Power.* Ballistic missile throwweight estimates based on *The Military Balance, 1984-85* and *1985-86* and Paul Nitze's speech "Negotiations on Nuclear and Space Arms," March 13, 1986.

Table A.2

PROJECTED U.S. AND SOVIET STRATEGIC OFFENSIVE FORCE BALANCE, 1996
(without strategic arms limitations; modest growth)

	U.S.	USSR
ICBM	1500 (550 MIRVed) 2950 RVs 1.5 MKg TWt	1803 (1068 MIRVed) 10,507 RVs 6 MKg TWt
SLBM	616/30 subs (616 MIRVed) 5184 RVs 1.1 MKg TWt	704/70 subs (552 MIRVed) 5088 RVs 1.2 MKg TWt
Bomber	96 B-52H w/ALCM 100 B-1B w/ACM 132 ATB w/SRAM/grav. 5240 weapons	100 Bear H w/ALCM 125 Blackjack w/ALCM 2500 weapons
Totals	2444 SNDVs	2732 SNDVs
	2116 ballistic missiles (1166 MIRVed)	2507 ballistic missiles (1620 MIRVed)
	328 bombers (196 w/ALCM)	225 bombers (all w/ALCM)
	13,374 weapons	18,095 weapons
	8134 BM RVs	15,595 BM RVs
	2.6 MKg TWt	7.2 MKg BM TWt

Table A.3

SOVIET CENTRAL STRATEGIC OFFENSIVE FORCE DEVELOPMENTS, 1986–1996

	ICBM	SLBM/SSBN	Bombers
Improved Prelaunch Survivability	– Mobility • SS-24 rail mobile • SS-25 road mobile – Retain hard silos for • SS-18 & 18FO Mod • SS-19 & 19FO Mod • SS-24 (?) & 24FO Mod – Improved launch-on-tactical warning capability • Improved launch detection satellite system • Large phased-array warning & tracking radars • *Improved* command-control communications to support prompt launch	– Quieter subs • Typhoon • Delta IV (?) – Long-range SLBMs patrol in protected bastions, under the polar ice cap, & in open oceans far from the U.S. • SS-N-20 & 20FO Mod • SS-N-23 – Increase SSBN day-to-day alert rate from 20% to 30-40%	– Put bombers on day-to-day alert • Bear H • Blackjack
Increased Effectiveness	– Greater accuracy • SS-18FO Mod • SS-19FO Mod • SS-24FO Mod – Increased number of RVs if no arms control • SS-18FO Mod (15) • SS-19FO Mod (10) • SS-25FO Mod (3) – Develop penetration aids as hedge against U.S. SDI	– Increased numbers of SLBM RVs • SS-N-20 & 20FO (9) • SS-N-23 & 23FO (8) • SS-N-27 (8-10) – Greater accuracy • SS-N-20FO Mod • SS-N-23FO Mod • SS-N-27 – Develop penetration aids as hedge against U.S. SDI	– Much larger number of bomber weapons • Blackjack • AS-15 ALCM on Bear H & Blackjack – Improved bomber penetration capability • Blackjack • Stealth bomber & ALCM development – Improved tanker IL-76

Table A.4

U.S. CENTRAL STRATEGIC OFFENSIVE FORCE DEVELOPMENTS, 1986–1996

	ICBM	SLBM/SSBN	Bombers
Improved Prelaunch Survivability	– Mobility • SICBM/Midgetman road mobile – Improved launch-on-tactical warning capability • Improved launch detection satellites • Upgraded BMEWs • Improved command and control • Improved NCA *survivability*	– Quieter subs • Trident – Increased SLBM range • C-4 • D-5 – Increased SSBN day-to-day alert rate • Trident sub – SSNs with TLAM-N	– Increased percentage of bombers on day-to-day alert • B-1B • ATB
Increased Effectiveness	– Greater accuracy • M-X • SICBM/Midgetman • MMIII – Increased number of RVs if no arms control – Penetration aids development as hedge against increased BMD deployments	– Greater accuracy • D-5 • TLAM-N – Penetration aids development as hedge against increased BMD deployments	– Improved penetration capabilities • ATB • ACM • B-1B • ALCM • SRAM II – Increased number of bomber weapons • ALCM • ACM • Bombs & SRAMs on B-1B & ATB

Appendix B
SEA-LAUNCHED CRUISE MISSILES

Both the United States and USSR are developing new long-range SLCMs, including small torpedo-sized weapons that can be deployed on a wide variety of submarines and surface vessels.

United States

- Tomahawk cruise missiles for land attack (TLAM) and antiship attack.
  - — Nuclear (TLAM-N) – 758 to be produced.
  - — Conventional (TLAM-C & Antiship) – 3236 to be produced.
  - — Torpedo-sized subsonic missile, to be deployed on 197 submarines and surface ships
  - — Initial Operating Capability (IOC) – 1984.

Soviet Union

- SS-NX-21.
  - — Torpedo-sized subsonic missile. May be deployed on Victor III, Akula, Mike, Sierra, and converted Yankee-class SSNs.
  - — Nuclear armed initially, may get conventional warhead later.
  - — IOC expected in 1986–87.
- SS-NX-24.
  - — Large supersonic missile.
  - — Test-fired from converted Yankee-class SSN.
  - — Nuclear armed initially, may get conventional warhead later.
  - — IOC in 1987–88.
  - — Ground-based version also under development.

Arms Control History

- SALT II.
  - — Testing permitted throughout treaty period.
  - — Deployment of long-range SLCMs (> 600 km) prohibited during the three-year Protocol that expired at the end of 1981.

  - Soviets have argued United States is violating spirit of SALT II by deploying SLCMs.
- START/INF Geneva Negotiations.
  - Soviets have long proposed a ban on long-range SLCMs (i.e. with range > 600 km). In June 1986 they proposed limited deployments on designated classes of submarines and inclusion of these warheads within the aggregate weapons ceiling.
  - United States refuses to accept any limitations on SLCM in either the START or INF negotiations.

Problems and Prospects

- Verifiable limits on SLCM exceptionally difficult to develop.
  - Small size/versatility. Can be carried on a wide variety of subs and surface ships.
  - Indistinguishability of the conventional and nuclear-armed variants.
  - U.S. Navy's determination to acquire large numbers of these weapons for several missions—conventional and nuclear land attack and antiship attack.
  - U.S. has been deploying SLCMs since the summer of 1984.
  - No way to verify range limit.
- Soviet proposal for range ceiling would unfairly penalize the United States because of geographical asymmetries. (Many coastal targets in United States, few in Soviet Union.)
- No prospect that the Reagan administration will accept any limits on SLCMs.
- Earliest opportunity for limits would be 1989 and by then this "horse" will be long out of the barn on both sides.

Sources: Data on Soviet SLCM programs from *Soviet Military Power March 1986*, p. 33. U.S. program information from James P. Rubin, "Sea-Launched Cruise Missiles: Facing Up to the Arms Control Challenge," *Arms Control Today*, 1986, p. 6.

X. SDI AND EUROPEAN SECURITY: A VIEW FROM FRANCE

by Pierre Lellouche

INTRODUCTION

Looking back at the developments of the past three years, since President Reagan's famous "Star Wars" speech of March 23, 1983, one is struck by the profound change that seems to have taken place in the West-West debate on SDI.

Both the tone and the focus of the arguments appear to have changed. Issues that were prominent early on in the public debate—the *strategic* implications of SDI for "coupling" and NATO's flexible response doctrine, the need to protect the ABM Treaty—have apparently disappeared from the public agenda. At the same time, a healthy narrowing down of the issues has also taken place: The initial and highly surrealistic discussion about a "post-nuclear world" has now been succeeded by a much more sober understanding about what SDI is supposed to achieve. No longer is anyone seriously debating the merits of fool-proof "bubbles" that the United States would generously offer to both its NATO allies and the Soviet Union. And even Ronald Reagan himself has somewhat toned down his early antinuclear rhetoric. The emerging consensus within the West is that nuclear weapons are here to stay at least through the first decades of the next century, even though strategic defenses may be introduced in the picture, somewhat modifying but not replacing nuclear deterrence.

With this background, today's debate is mainly about technology, and no longer about strategy. The emphasis of Alliance discussions has shifted to the difficult question of European access to the U.S. research program, as well as to the potential applications of SDI-related projects for future air defense requirements in Europe. Under pressure from industry both in Europe and in the United States (who correctly see this as a useful tactic to diffuse Europe's lingering opposition to SDI), a new debate has emerged in Europe around such concepts as ATBMs, "Extended Air Defense," and the so-called EDI (European Defense Initiative).

Meanwhile, the tone of the whole SDI debate, which tended to be quite acrimonious earlier on (recall, for instance, Geoffrey Howe's

reference to a "Maginot Line in space" and Weinberger's dictatorial 60-day deadline for European participation to SDI), has now been replaced by a much quieter atmosphere. At present, industry on both sides of the Atlantic conduct their business discreetly while governments keep a polite silence on the wider political and strategic issues on which they in fact continue to disagree. In short, today's situation could be compared to a temporary truce: The "big" strategic issues are in effect frozen, at least until the technological horizon clears up, allowing deployment decisions to be made or not made (presumably by the end of the decade); in the interim, various governments and firms involved attempt to work out satisfactory cooperative relationships on the technology front.

There are obviously good reasons, from an "Alliance management" point of view, to explain and even support such an evolution. First, given domestic political realities on both sides of the Atlantic, NATO can scarcely afford, on the heels of a very divisive INF controversy, another "grand debate" that would reopen the highly sensitive and unresolvable issues related to risk sharing and the differences of vulnerabilities between the two sides of the Atlantic. This is all the more so in the case of SDI, because a fundamental question mark remains as to what kind of defense will be possible, at what cost and in what time frame. Until these questions are answered, a continued transatlantic quarrel on SDI would serve no one except the Soviet Union. Second, with the resumption of arms control talks between the United States and the USSR in 1985, coupled with an unprecedented Soviet propaganda offensive aimed primarily at the Europeans,[1] the allies simply cannot fight each other publicly, thereby weakening the U.S. negotiating stand in Geneva, risking a major anti-European backlash in the United States, and serving Soviet ambitions in Europe. Finally, even if all European governments had chosen to go the route of open opposition to SDI, European industry would have had another point of view: Any industry manager knows that waiting until the "big" strategic arguments are resolved before getting on to new research investments is simply out of the question. Once the United States has decided to mobilize its resources around a whole array of new technologies, whether under an SDI flag or not, the alternative for European hi-tech firms is either to join in or perish at some later stage.

[1]Gorbachev's January 15, 1985 proposal for "the complete elimination of nuclear weapons" by the turn of the century is analyzed in the last section of the paper. The January 1986 offer was followed by a half dozen proposals mainly targeted at the Europeans, including deep reductions of conventional and tactical nuclear weapons in Europe, a ban on chemical weapons, the creation of nuclear free zones in Europe, and the dissolution of the two military alliances.

FRANCE'S ATTITUDE TOWARD SDI

Perhaps the clearest illustration of these realities can be found in the evolution of French attitude toward SDI.

Although President Mitterrand initially appeared to be quite fascinated by the prospects of "Star Wars" (to the point where in a speech given at the Hague on 7 February 1984, he called for Europe "to look beyond the nuclear era" and jointly develop a military capability in space), France's official reaction at the Geneva Committee on Disarmament on 12 June 1984 was negative. France proposed to prohibit "for a duration of five years, to be extended, the deployment on the ground, in the atmosphere or in space of all directed energy weapons capable of destroying ballistic missiles or satellites, as well as to prohibit testing of such systems." The French proposal also included a very strict limitation of ASAT weapons and contained a line of arguments on the ABM question that was embarrassingly close to the Soviet line, especially since the French proposal was made public two weeks before Mitterrand's visit to Moscow.

Yet, having said "no" to SDI, the French government soon realized that it had locked itself into a corner:

- Clearly, the United States was not going to drop its program just because its allies didn't like it;
- Assuming it did, France would still be left with potential Soviet defenses, the magnitude of which was suddenly highlighted by the SDI debate;
- Keeping a high profile of attack against the U.S. program was hardly tenable politically, given the resumption of Soviet-American arms control talks in early 1985 and the fact that France more than ever needed the total support of its American ally in order to reject repeated Soviet demands to constrain the Force Nucléaire Stratégique (FNS) as part of an INF deal. One can hardly be siding with the Soviets on the SDI issue and hope at the same time that the United States would continue to stick with France on the INF front;
- With ABM, ASAT, and space research likely to continue, and be accelerated in the future, France had no other option but to increase its own technological effort. The "no" in Geneva in 1984, and the further official "no" the following year to government-to-government cooperation with the United States left the whole technological side of the issue totally unanswered.

Based on these realities, France gradually moved to a more pragmatic attitude based on a clear-cut distinction between the strategic and technological sides of the SDI issue.

- On the strategic side, France maintained its opposition in principle, seeing SDI as:
  - — basically "destabilizing" for European security as a whole and for the arms competition between the superpowers,[2]
  - — dangerously demobilizing in its implications for Western public opinion: The French saw Reagan's anti-nuclear rhetoric as an ex post facto justification of the European peace movement and as something that could further undermine what was left of Western consensus on deterrence after the Euromissile battle.[3] Implicit in this critique was a very real fear that Reagan's rhetoric could also threaten French domestic consensus on the national deterrent, something quite unacceptable to any French Government,[4]
  - — but of limited impact militarily, to the extent that SDI in no way implied the extinction of nuclear weapons. Given the uncertainty and the enormous difficulty of the technology (particularly for boost phase interception), the large number of countermeasures that can be devised to defeat any comprehensive defense, SDI in all likelihood cannot be expected to replace nuclear deterrence. What is far more likely in the forseeable future (in the next three decades) is that SDI will lead to a far more complex combination of both offensive and defensive weapons, but not to the outright replacement of nuclear deterrence. This means that the FNS itself was not threatened at least until 2015–2020.[5]

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[2]This was restated recently by François Mitterrand himself in his book: *Reflexions sur la Politique Etrangère de la France*, Fayard, Paris, 1986.

[3]The clearest official presentation of this argument can be found in the interview of Defense Minister Paul Quiles in *Le Monde*, December 8, 1985. Also illustrative of the French exasperation with the early U.S. rhetoric SDI is the interview by Claude Cheysson (former Foreign Minister) in *Liberation*, May 3, 1985. "We have made a major effort to convince the Germans to deploy Pershings in the face of Soviet SS-20. A few months go by, and now they are told that in any case the missiles are obsolete and that they will become rapidly useless. In other words, this encourages the neutralist sentiment and those in Germany who say 'No nukes in our home'."

[4]See an interview with Raymond Barre in *l'Express*, May 31-June 6, 1985: "European countries must at all cost prevent their public opinions from believing that a new type of defense, which would permit the renunciation of nuclear deterrence, is within reach. European security has rested and will rest for a long time on nuclear deterrence."

[5]Mitterrand stated, during the launching of the new SSBN, *l'Inflexible*, on May 25, 1985, "Deterrence is based on nuclear submarines and it has many long years before it. . . . In my opinion, strategy will necessarily be spacial during the next century, but we

A major implication followed from this: In addition to maintaining domestic French, and beyond, European consensus on deterrence by countering Reagan's rhetoric, France's priority should be to mobilize its technological resources to ensure that its FNS would retain its credibility in the face of a rapidly changing technological environment.[6]

This is precisely where the strategic aspect of SDI encounters the other half of the coin, namely technology. In early 1985 after having tried a European and "peaceful" route to cooperation in high technology (Eureka), France realized that it too had no alternative but direct cooperation with the United States. Pressure from industry, combined with a lack of commitment by both the UK and the FRG to invest in Eureka, led once again to a pragmatic adjustment: In the fall of 1985, Prime Minister Fabius and the new Defense Minister Paul Quiles announced that France's opposition to SDI, and the absence of government-to-government cooperation with the United States on technology, in no way precluded French firms from entering directly into cooperative deals with their U.S. counterparts or even with the Pentagon itself.[7] From that moment onward, France found itself in the somewhat bizarre position (its critics would call it hypocritical) of opposing SDI in principle while letting its firms, including the nationalized ones, run to Washington to secure contracts.

The nomination of the Chirac government following the March 16 legislative elections has brought no basic change to this pattern. Contrary to expectations, especially outside France, that a right wing government would adopt a more "positive" attitude to SDI, the Chirac government has remained extremely careful on the whole subject of SDI, insisting instead on France's continued commitment to nuclear deterrence[8] (a commitment made even stronger by Chirac's decision to

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will have to wait many decades before it becomes operational. The 'link' between both strategies may well take a half century, and as for myself, I am accountable for one part of that half century." For a detailed forecast of the effect of SDI-related technologies on the French nuclear force as seen by a chief weapon planner (now a key adviser to Defense Minister André Giraud), see Jacques Chevallier: "Nouvelles technologies et Force Nucléaire Stratégique" (unpublished), November 1985. Chevallier sees the eventual deployment of ground-based BMD in the United States by 1990–1992, and possibly space-based boost phase interceptors around 2015 at the earliest.

[6]As early as November 1984, Defense Minister Hernu announced an additional 550 million Francs in the 1985 defense budget for R&D work aimed at improving the penetration of French warheads. The move was presented as a "preventive measure" against defensive developments by the two superpowers.

[7]See Quiles, *Le Monde*, January 25, 1986.

[8]Chirac's inauguration speech to the National Assembly reads in part: (*Le Monde*, April 11, 1986), "Technological progress is leading to the emergence of defensive systems utilizing space. Their birth will not upset for many years to come, and may never upset the fundamental basis of nuclear deterrence. Our American allies are actively working on this project, and important changes may thereby occur in the world balance, in the

build the SX mobile ballistic missile).[9] The only difference here is one of style rather than substance. Chirac and his defense minister André Giraud have refrained from openly criticizing SDI the way the previous government had done, and the prime minister himself went as far as to announce France's "support" to the American initiative in May 1986.[10]

However, when it comes to technology cooperation, the new French government, despite statements made before the election by some right wing leaders,[11] shows no sign of following the British or the German route of government-to-government agreements with the United States. In fact, in his September 1986 speech to the *Institut des Hautes Études de Défense Nationale* (IHEDN), Chirac openly came out against France's joining ATBM future programs, even though at least three major French firms (Matra, Thomson, and Aerospaciale) have submitted ATBM architecture studies to the Pentagon. Thus, what we do have is a continuation of the same policy: French firms, if they so choose, may enter into deals with the Strategic Defense Initiative Office (SDIO) or U.S. firms without being hindered by the politics of SDI. (French industry executives, far from feeling penalized by the absence of intergovernmental agreements, find this situation far more satisfactory than that of their British and German colleagues.) As for defense, Chirac's government is continuing (and even further emphasizing in some respect) France's absolute priority on its nuclear deterrent, SDI notwithstanding.

EUROPE AND SDI

Leaving the question of national style aside, the evolution of French attitude in respect to SDI is in fact remarkably similar, in substance,

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dialogue between the two great powers, as in the defense of Europe. We must watch this evolution carefully, as well as the technological gaps that may result therefrom, proceed to the necessary adaptations and avoid missing the opportunities to strengthen European solidarity in this field as well." Chirac stressed the same views again in his speech to the IHEDN in early September 1986.

[9]This is one important difference with the previous Socialist government, which had dropped the SX from the five-year defense Program Law (1983–1988) and wanted to postpone a decision on new nuclear delivery vehicles until more was known on the potential for new defensive technologies.

[10]*Le Monde*, May 23, 1986.

[11]Most such statements, however, rarely mentioned French-U.S.technological cooperation as such but insisted on French participation in the framework of a "European cooperation" (with the FRG and the UK) with the United States. See Giscard d'Estaing in *Le Monde*, December 4, 1985, Raymond Barre in *Politique Internationale*, Fall 1985. As to the common RPR-UDF platform drafted before the March elections, it read: "The opposition favours a participation (by France) to the U.S. SDI, in connection with Britain and Germany."

to that of the other major European players. As usual in such sensitive alliance matters, what the French have done (notably in the June 1984 document presented to the UN Conference on Disarmanent (UNCD) was to articulate openly what the other Europeans think but do not dare to tell the Americans quite so bluntly.

Yet, even if the FRG, the UK, and Italy have been on the whole rather more forthcoming than France toward SDI (despite a string of highly critical public statements by senior British and German officials earlier on), it is evident that major disagreements remain with the United States on a whole series of issues ranging from the security implications of SDI for NATO strategy to technology and economics.

On the strategic front, for instance, both the UK and the FRG officially support SDI as a legitimate, prudent edge against Soviet ABM programs. And yet, neither the British nor the German governments are ready to live with the logical consequences of their "support," to agree with the U.S. refusal to deal on SDI at the Geneva table and even less so to the U.S. desire to test such weapons and perhaps even to modify the ABM Treaty if and when necessary. On the contrary, London and Bonn, like Paris, are on record as favouring a deal on SDI in exchange for deep cuts in offensive weapons, and all three strenuously oppose any modification of the ABM regime. The same basic ambiguity exists on the technological front: The British first (in late 1985), followed by the Germans (in early 1986), concluded government-to-government agreements with the United States designed presumably to define the rules of the game for technology cooperation on SDI projects. And yet, although it is clear that the United States obtained what it wanted with these agreements (the demonstration to the world, and to the Congress in particular, that Europe was fully on the American side on SDI), the same can hardly be said to be true for either Bonn or London. According to various sources, and to the text of the German-U.S. agreement leaked to the German press, the United States accepted none of the conditions for technology sharing put by the Europeans. The agreement reportedly contains only vague principles but no clear U.S. obligation to guarantee their allies a wide access to SDI results. Indeed, the contrary would have been surprising: The long track record of U.S.-European cooperation on high technology (be it on civil nuclear energy, space or armaments) suggests that U.S. firms rarely practice philanthropy, but instead drive very hard bargains indeed. Margaret Thatcher's hope to secure for the UK a whole slice of the SDI cake (up to an amount of $1.5 billion) and Helmut Kohn's expectation that German industry would have access, across the board, to the whole array of SDI-related results, were equally naive. To the extent that there will be allied

cooperation on SDI, it will be based instead on a series of cooperative arrangements in the areas where Americans actually need European technology and knowhow because they are superior or cheaper. Moreover, only in those areas can one expect a two-way street on technology sharing and even then under strict legal constraints imposed by U.S. firms (licensing) and U.S. government (secrecy, no transfer rules). Based on these realities, it is not surprising that French firms do not feel particularly penalized, compared with their European competitors, by the absence of a government-to-government agreement between Paris and Washington.[12]

THE ALLIANCE AND SDI

For the time being, at least, the complex *modus vivendi* that has come to exist between the Allies on the SDI issue has been on the whole rather positive, particularly for the United States. Not only has the Reagan administration managed to neutralize what was initially a strong European public opposition to its plan, but it has even succeeded in turning this opposition into a supportive attitude, at least in declaratory terms, a useful asset indeed in front of both the Congress and the Soviets (at the arms control table).

In return, the Europeans have obtained two important points:

- First, a modification of the Reagan rhetoric in a direction less damaging to public consensus on defense (ironically, however, SDI and Reagan's earlier promise to do away with nuclear weapons seem to have helped in making many Europeans, including those who fought against the Pershings, rediscover the merits of nuclear deterrence);
- Second, the inclusion in U.S. policy of certain key limitations regarding the future of SDI: the notion that the ABM Treaty should continue to be respected and that any deployment decision would require prior negotiations with the Soviets. One can argue, of course, that both of these conditions were in any case inevitable: abiding by the ABM Treaty would probably have been necessary anyway to secure continued congressional funding of SDI; prior negotiations with the Soviets are inevitable if one is to prevent massive Soviet countermeasures to a nascient SDI deployment program (the Reagan administration itself

[12]The successful sale by Thomson CSF of the Rita Communication System to the U.S. Army in 1985, despite direct political pressures by Margaret Thatcher on behalf of a competing British system, is often quoted by French industry in support of that view.

recognized this, as reflected in Nitze's criteria for the so-called "transition phase"). On the whole, however, one cannot discount the European's role in turning these two key conditions into official U.S. policy.

On the negative side, on SDI the Europeans have given another proof of their chronic inability to "get their act together" on a subject of immediate importance to their own safety and economic integrity.

The failure to come up with even a minimum common political platform among the key European capitals (even though they all shared the same fears and views of SDI), and the even poorer show of European unity on the technological front (with the de facto failure of Eureka, as a concerted response to the SDI challenge) are indeed quite depressing. Politically and technologically fragmented, such a Europe is condemned to more dependence on the United States, rather than less, and to more complaints, rather than the kinds of positive actions that would be required to influence U.S. and NATO policy in a direction consistent with European interests.

All this means that the modus vivendi we now have between the allies should be seen as only temporary and fragile. The larger issues related to strategy—the future role of nuclear weapons in European security, the continued validity of Flexible Response in a offense/defense world—involve fundamentally different security interests among the Allies, and these show no sign of being resolved at any time soon.

Three years after the March 23 speech, one has yet to hear a single convincing argument as to why an SDI world would be better for European security and NATO.[13]

The notion sometimes advanced by American SDI advocates that an invulnerable United States (as in the 1950s) would better be able to guarantee the safety of a vulnerable Europe simply does not fly. Because the Soviets would inevitably match any ABM deployment on the U.S. side, the result will not be a "fully inaccessible U.S. facing an unprotected USSR, but two protected superpowers."[14] That in itself may not be a bad thing, at least as far as U.S. and Soviet security are concerned. Indeed, it may very well be that reducing the vulnerability of U.S. retaliatory forces to Soviet potential first strikes may contribute to enhancing deterrence between the superpowers and thus reduce the risk of direct "out of the blue" attacks from one superpower against the other. But the price for reducing such a minimal risk would most

[13]See Pierre Lellouche, *L'Avenir de la Guerre*, Mazarine, Paris, 1985.

[14]See Pascal Boniface et François Heisbourg, *La Puce, les Hommes et la Bombe*, Hachette, Paris, 1985.

probably be a new spiral in the strategic arms race, in terms of both offensive and defensive weapons (a point that the French government made strongly in its June 1984 proposal to the Geneva Committee on Disarmament). Moreover, even if one assumes that strategic defenses may reinforce stability between the two superpowers themselves, the same logic does not hold true for Europe.

For in Europe, the primary condition for American extended deterrence, given parity at the strategic level, is that the U.S. president be given a wide array of selective employment options, allowing for both escalation control and early war termination. Short of that, extended deterrence would be tantamount to suicide, neither acceptable to Americans (be they Liberals like McNamara or Conservatives like Kissinger), nor credible to the Soviets. In this connection, one should always bear in mind that under current NATO doctrine and force posture, it is the U.S. president who is supposed to take the historical responsibility of initiating the use of nuclear weapons. If one assumes (as most Europeans do) that we would have ABM on both sides, and not just in the United States, then the logic of strategic defenses would be to drastically reduce the chances for selective first use of nuclear weapons, at least those targeted against the Soviet Union. To penetrate Soviet defenses, any attack against military assets would have to be drastically increased, thus making the likelihood of such first use even less probable than it is today. The one exception would be the use of short-range battlefield weapons targeted at Soviet assets in Eastern Europe, but that would limit the war to Europe only, leading to the very decoupling that the deployment of the Pershings and Cruises was precisely aimed at remedying.[15]

The logic of SDI advocates who argue that the United States should move away from MAD and "killing innocents" and go instead for increased selectivity actually turns against its authors: The ABM deployments on both sides would in fact kill selectivity and turn back the clock to the era of massive countercity strikes.[16] In such a world, the risk of substrategic wars both conventional and short-range nuclear would be increased and channeled directly to the various peripheral regions—and of course to Europe—while the U.S. strategic arsenal would lose even the residual relevance it has today for non-U.S. contingencies.

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[15]Lellouche, 1985.

[16]Ironically, the point was made quite candidly to the author by George Keyworth, Reagan's scientific adviser, in a March 1985 interview. Keyworth spoke of giving back the superpowers' strategic forces their original role of pure retribution instead of the war-fighting role they had now acquired. With SDI, he added, these forces will become like the French *force de frappe*.

In short, then, as far as European security as a whole is concerned, the reintroduction of strategic defenses in the nuclear equation between the superpowers is clearly not a positive prospect. It threatens to undermine what is left of the credibility of U.S. first use of nuclear weapons, and it will also necessarily translate into many fewer resources devoted to NATO as more and more funds will be directed to SDI deployments. Another consequence will be to force both European nuclear powers to devote more funds and efforts to maintaining the credibility of their own national deterrents, in the case of France in particular leading to further cuts in conventional forces needed in central Europe.[17]

WESTERN SECURITY INTERESTS

Like it or not, these wider security considerations, which for the moment have been quietly swept under the carpet, are bound to affect the future evolution of intra-alliance relations as SDI ceases to be "pure" research (which it is not in fact) and increasingly moves on to the development and deployment stages.

Implicit in the current stage of the transatlantic SDI relationship are, it seems to me, a couple of wrong assumptions implicitly made on both sides of the Atlantic.

The first assumption flows from a sensible proposition but arrives at a wrong implication. The sensible proposition analyzed earlier in this paper is that since we don't know what kind of defenses SDI will eventually lead to, there is no point in having a sterile and divisive strategic debate within the Alliance. The wrong implication is that sometime in the next five years or so, there will be a clearcut point at which technology findings will be such as to permit a fully informed deployment decision and an analysis by the Alliance of its implications for NATO strategy. Implicit in this reasoning is a European secret hope that either SDI will fail to bring cost-effective defenses and there will be no change required to NATO's current "flexible response" posture, or that even if some defenses are possible, then the Alliance will always find in due time the means to adjust to them.

In reality, there won't be one clearcut decision point, and one clearcut deployment decision, but a far more complex flux of mini-decisions spread over time. We are dealing not with one single technology development, but with a whole range of different technology fields, each with a different time scale (whether one looks at electronics,

[17]To the displeasure of the Reagan administration, this point was made publicly by SACEUR himself (General Rogers) in a February 1986 presentation at IFRI.

ground-based conventional BMD, or space-based directed energy segments). Moreover, in every case, we won't have a clearcut jump between "pure" research and deployment, but more likely a whole series of in-between phases, notably testing. And because testing will inevitably at one point or another call into question the continued existence of the ABM Treaty, at least under its present form, then it is quite likely that the Alliance will have to face up to the larger security and arms control implications of SDI *before* deployment decisions will be actually made. For the moment, Europeans in general, including European governments, have remained aloof from the American debate about whether the United States should adopt a "restrictive" or an "extensive" interpretation of the ABM Treaty. Yet this issue is bound to spill over into Alliance politics sooner than governments tend to think.

A second assumption, which is precisely aimed at overcoming the difficulties stemming from the first, is that the best way to secure a continued alliance consensus on SDI is to launch an equivalent defensive program for NATO, specifically tailored to the Europeans' needs. Whether it is called ATBMs, EDI, or "Extended Air Defense," such a program would:

- Create a political commitment in Europe for defenses, thereby reinforcing U.S. policy;
- Create a strong constituency in European (and U.S. industry) thereby reinforcing the whole SDI program;
- Help prepare NATO for future military requirements (notably against the threat of conventionally armed short- and medium-range missiles);
- Allow unlimited testing of ABM relevant technologies to the extent that the ABM Treaty applies only to the interception of intercontinental missiles.

Over the last year or so, the idea of a mini-European SDI has gathered strength in both the United States and Europe (including Germany and France itself),[18] fueled by active lobbying efforts from the industry. And it has been proclaimed as a substantial element of the overall SDI effort by Secretary Weinberger.[19] The amazing thing about this trend is that no one has conducted a detailed analysis of what ATBMs would do for European security. The assumption seems to be, quite simply, that because the United States does SDI and the Soviets

[18]Following statements made by the German Defense Minister Manfield Woerner, the Elysée began moving in that direction in January 1986.

[19]See *International Herald Tribune*, April 26, 1986.

also have an active ABM program, then Europe should do it too. But for what purposes and at what costs? For instance, how does one prevent the Soviets from saturating a theater BMD in Europe? And assuming a mobile BMD can be devised to overcome that particular difficulty, how mobile would it be given the size of European territory, and who would buy it given the status of all European defense budgets? Finally, if both NATO and the Warsaw Pact go for such theater BMD, what would happen to NATO's latest FOFA doctrine and the stress being put on deep interdiction through ballistic conventional missiles?

Although there is certainly an argument for Europe to keep a close watch on defense-related technological developments, the strategic and economic rationale of a full-fledged ATBM program (compared in particular with buying more effective offensive weapons to penetrate future Soviet defenses) is far from being convincing at this stage. Using ATBMs as a means of sustaining Alliance cohesion to SDI may not be, over the long run, as promising a strategy as some like to think.

IMPLICATIONS FOR ARMS CONTROL

Adding to these unresolved political and security difficulties within the Alliance is of course the complicated arms control game played in Geneva since January 1985.

If, as claimed by the Reagan administration, it is SDI that forced the Soviets to return to Geneva, Geneva is also the place where the Soviets will do their utmost to slow it down and exploit diverging security interests between the allies. What is equally true, and worrisome for European and Alliance security interests, is that the Reagan SDI rhetoric about doing away with nuclear weapons has provided the Soviets with a golden propaganda tool. Since the Gorbachev January 15, 1986 speech proposing the complete elimination of nuclear weapons, what we have had is an escalation of propaganda diplomacy focusing precisely on the theme of denuclearization, the worst possible in terms of European stability.

As to the substance, the chances for an agreement appear to be very slim indeed if only because the history of arms control talks suggests that agreements generally require two basic conditions that are not met in this case:

- A situation of parity between the two sides,
- An agreement on the basic rules of the deterrence game.

The possible reintroduction of defenses in the strategic equation through technologies that remain to be defined and tested creates a

huge question mark on the kind of deterrence equation that will apply between the superpowers by the turn of the century. In the absence of an agreement on the rules of the game, which can come either from a political decision on both sides or from an assessment of the feasibility and cost-effectiveness of new defensive technologies, one can hardly see what Washington and Moscow could agree on, since they themselves do not know what their strategic relationship will look like in the coming decade.

Far from making any serious reduction in offensive arms possible (because neither side will have the absolute certainty that the other will not come to a series of technological breakthroughs in the next 5, 10, or 15 years that could be rapidly translated into an effective ABM shield of some kind), this situation of complete uncertainty on the defensive side will probably push a further acceleration of the offensive buildup by the Soviet Union first and the United States later. Hence, the total impasse in Geneva with each side wanting exactly the opposite from the other: The Soviets want a deal now, preventing any defensive arms, in exchange for what they promise will be deep cuts in offensive arms later. The United States wants deep cuts now on the offensive side, and no constraints on defense.

In the aftermath of the 1985 Reagan-Gorbachev summit, an attempt was made (particularly in the exchange of letters between Gorbachev and Reagan in June and July 1986) to bridge this fundamental gap by linking a reduction of offensive arms to a time clause to be applied to defensive arms deployments. According to what is known of the so-called "grand compromise" formula, Gorbachev initially proposed in June 1986 to trade a 30 percent cut in strategic offensive arms (with the U.S. forward-based systems not included in the count) in exchange for a 15- to 20-year U.S. commitment to remain within the ABM Treaty constraints. While "research" on defensive arms would have been authorized (as it is in the ABM Treaty) the proposal would have, in effect, frozen any SDI testing, development, and, of course, deployments for the duration of the agreement. In reply, Reagan proposed to agree to a postponement of *deployments* by seven and a half years (half of Gorbachev's proposal), but insisted on America's freedom to continue both research and development (including testing) in the interim.

Not surprisingly, the "grand compromise" ended in a deadlock because it failed to resolve the basic questions raised earlier of parity and the relationship between offense and defense.

For the Europeans, the persistence of such an impasse on strategic offensive and defensive arms has raised and will continue to raise some extremely sensitive issues. The main difficulty here is not just that most European governments would rather see the superpowers reduce

offensive arms and consolidate the ABM Treaty (which is widely considered in Europe good for both European public opinion and the stability of the security equation), but it is also that in the absence of a deal on central strategic arms, both superpowers may be tempted to trade a little too lightly on European security interests.

The catch here, of course, is the link, imbedded in the Geneva Talks themselves, between strategic nuclear and space arms on the one hand and medium-range nuclear weapons based in Europe (and Asia) on the other. From the very beginning of the so-called "Nuclear and Space Talks" (NST) in January 1985, the Soviets have been extremely persistent in trying to use this link to play U.S. strategic interests against those of their allies and vice versa.

During the first year of the talks (from the January 1985 Schultz-Gromyko meeting in Geneva to October that same year), the Soviets, in an effort to rally the West Europeans against SDI, insisted that there would not be any deal on the Euromissiles as long as SDI was not settled. When this failed to scare the Europeans, particularly after Britain and Germany not only softened their public criticism of the U.S. initiative but even began preparing government-to-government agreements with the United States on technology transfers, the Soviets abruptly changed their tactics. Knowing from the first Reagan-Gorbachev summit in November 1985 that Reagan was personally committed to his program and that, as long as he was there at least, there would be very little chance to see an SDI settlement in Geneva satisfactory to Soviet interests, the Kremlin began pushing the United States in the direction of a separate deal on Europe. Their calculus was simple, and accurate: Given the fact that it was still premature to win the SDI battle now, at least one could try using Reagan's domestic problems to score some decisive points on the European front. The key Soviet objective here being the withdrawal of U.S. INF forces from Europe as a major step toward the gradual expulsion of the United States from Europe. The shift in Soviet arms control priorities from SDI to Europe and INF actually began in October 1985 with the Mitterrand-Gorbachev summit in Paris, where it was rumored for the first time that the Soviets may be willing to agree to decouple INF from SDI. There were more rumors on the same subject in November during the first Reagan-Gorbachev summit, but the official announcement came on February 6, 1986, when Mikhail Gorbachev informed Senator Kennedy that the Soviet Union was no longer insisting on an SDI ban as a condition for a settlement on the INF situation.

Another key element in that shift had come two weeks earlier in the spectacular announcement of Gorbachev's January 15 plan "to rid the world of all nuclear weapons by the turn of the century." When

stripped of its rhetoric, the only really new part of the plan was that the Soviet Union was now ready to accept a *zero-zero* formula on INF in Europe, a major shift from the earlier position (until then the Soviets had insisted to keep at least as many SS-20s as the aggregate number of French and British warheads). The Soviet shift from SDI to INF was met with a sigh of relief in the United States.

With its attention entirely focused on how not to bargain on SDI at the negotiating table, the Reagan administration had tried from the very beginning (notably during the Schultz-Gromyko meeting of January 1985) to decouple the INF affair from the strategic "table" and, within the latter, to further decouple progress in offensive arms reduction from discussions on defensive arms. With respect to the INF, the great American nightmare was to see the Soviets rally the European allies against SDI after convincing them that the continued deadlock on INF was only due to U.S. "intransigence" in refusing to negotiate on SDI. This fear of seeing SDI being made the hostage of INF, and therefore a subject on which the allies would have to be constantly consulted and convinced, explains why President Reagan was so eager to support Gorbachev's idea (circulated in October 1985 in Paris) of direct nuclear talks between Moscow and the two European nuclear powers as a solution to the never-ending French and British inclusion issue, and why, also, the Reagan administration was keen to accept the Soviet offer of a separate INF deal to zero-zero in February 1986. By that time another consideration had come to reinforce this general attitude: the need for the Reagan administration to diffuse mounting domestic pressures against its own strategic programs (on such items as ASAT, the Test Ban, and of course SDI), by producing at least some concrete evidence of progress on the Geneva front in time for Reagan's second summit with Gorbachev in late 1986. Of all three "tables" in Geneva, INF was the obvious candidate, given the U.S. refusal to accept any limitation on SDI (which meant a deadlock on offensive arms as well).

The Soviets of course knew of these American preoccupations and obviously calculated their "concessions" for maximum effect: The decoupling between SDI and INF came as a divine surprise in Washington, especially as no American sacrifice of any kind was requested by the Soviet side to achieve an INF deal. Not only did the Soviets recognize at least implicitly the legitimacy of U.S. INF deployments in Europe, but they even dropped the demand for U.S. "compensation" for French and British systems. The only thing the Soviets now demanded involved the forces of its allies (at no transfer commitment and a freeze on French and British systems) but no unequal limits whatsoever on U.S. forces. A very tempting offer indeed, and one should not be surprised if the United States came close to be tempted, at least initially.

To its dismay, the Reagan administration found, upon sending emissaries to Europe in the course of preparing the U.S. answer to Gorbachev's plan, that the Europeans who had wavered so long during the predeployment years now wanted to keep the Pershings and Cruise and generally opposed any thought of a zero option. No longer facing domestic opposition against the NATO missiles, and fearing the political and military implications of their possible withdrawal, the Europeans began to suspect that the Reagan administration was perhaps ready to "sell the Euromissiles in exchange for keeping their SDI." An unfair suspicion perhaps, but one that reflected quite accurately the change of attitude that had taken place since the end of 1983. Throughout the INF battle, Europe accused the United States of negotiating in bad faith and blocking the chances for any agreement, while in the United States, the Europeans were seen to be ready to sign just about any deal not to deploy. By February 1986, the whole scene had been turned upside down: *Newsweek* for the first time in a very long time wrote about the allies, "hard line" on arms control,[20] while the Europeans, very much in the same way as during the "gray era" debate of the mid-70s, began to suspect that the United States could perhaps sacrifice allied interests at the Geneva table to salvage those strategic programs that the United States saw as vital for its own interests.

Although the United States temporarily yielded to the European reaction by rejecting Gorbachev's zero-zero offer, the respite did not last more than a few months. By the fall of 1986, after the "grand compromise" had failed to break the deadlock on strategic and space issues, INF emerged once again as a prime candidate for *the one and only* deal that could be had during the second Reagan-Gorbachev summit, scheduled for the end of that year.

"Zero-zero" being out, the United States tried to get the Soviets to accept an interim deal at a level around 400 warheads. The Soviets still maintained their preference for zero and offered one more "concession" by agreeing to leave out, at least temporarily, the issue of French and British forces from an *interim* accord. By September 1986, even though many details remained to be worked out (particularly in respect to the duration and verification of the agreement and to the number of SS-20 allowed in Asia), the United States finally accepted bringing down the number of its INF in Europe to 100 warheads only in the framework of an interim agreement.

Although, on the surface, an agreement at such a low level could be presented as a "good" deal for the West (since it would impose proportionally deeper cuts on the Soviets, who now have nearly 800 SS-20

[20] *Newsweek*, March 3, 1986.

warheads, than on NATO whose total number of Pershing and Cruise was to be 572), it is clear that such a deal would *not* be in Europe's interest. In the first place, a lowering of the SS-20 threat would be of little military value as long as the several hundreds of other shorter range INF—such as the SS-21, 22, and 23 and also the modernized SCUD missiles—are not eliminated in the same manner. For the latter can easily inflict the same kind of damage (and political blackmail) on Europe as the SS-20.

Second and more important, one has to ask what the effect of a withdrawal of most NATO INF would be on the entire military and political rationale of the original INF of December 1979: the need perceived in Europe to adjust flexible response to the new era of strategic parity. As Helmut Schmidt had said in his famous IISS speech in 1977, the "neutralization" of the superpowers' strategic arsenals made it imperative for the Alliance to have long-range nuclear assets based in Europe capable of reaching Soviet territory in a reliable fashion, so as to "recouple" the European theater to continental U.S. defense. Although the case for INF modernization was predominantly and erroneously argued to the public in reference to a single type of Soviet weaponry, the strategic rationale for NATO INF deployment is in fact much broader than the SS-20 issue. It was, and remains, entirely founded on the evolution of the overall nuclear balance between the two superpowers.

With this in mind, it is by no means evident that a hundred INF warheads only (that is to say if the Soviets accept a "mix" of some 36 Pershings and 16 batteries of four cruise each) would be sufficient to ensure the "coupling" that was sought in the first place. All the more so if the Soviets are allowed to keep all or most of their short-range INF. For the longer term, and depending on the duration of such an "interim" deal, the Europeans are bound to ask themselves whether this INF withdrawal is not another major step, after Montebello and NATO's gradual shift toward the "conventionalization" of its doctrine, toward a de facto U.S. nuclear disengagement from Europe, leading at some future date to its conventional disengagement as well.

But even leaving these long-term military issues aside, in the event of a massive INF withdrawal, European governments are also bound to face the political consequences of such a decision by the United States. Wouldn't such a move validate *ex post facto* the arguments of those sectors of the European left in particular who opposed NATO's INF decision in 1979–1983 on the ground that it was only a dangerous political game with no military value at all—that the missiles were not necessary in the first place?

The additional difficulty here is that NATO had committed itself in advance to accept such a withdrawal, including the possibility of a zero-zero formula in the event the Soviets did the same. Hence this dilemma: The Europeans can hardly refuse a deep reduction of INF, which they kept insisting upon since 1979; yet accepting a massive withdrawal of Pershing and Cruise is bound to re-open the still unresolved issue of what flexible response really is about in an age of parity, and what kinds of weapons it really requires. One does not need to dwell on the political consequences of such a situation: The danger is that the latent nuclear debate in Europe will once again be reopened at the very time when the center of gravity of the security debate in Europe and in the European left (particularly in the UK and the FRG) is clearly moving toward unilateral denuclearization.

Another issue that is bound to be raised once again is that of the French and British forces, even though these would be temporarily left out of an interim agreement. In respect to the United States, the Soviets have been clever enough to drop their contention of American compensation for their allies' nuclear forces. So long as the Soviets maintained that particular demand, the United States had a strong *national* (as opposed to Alliance) interest in rejecting any deal constructed on that basis. That interest today has been removed and the only argument that the United States can oppose from now on is that it cannot negotiate on behalf of other countries. The problem is that the United States may not hold this argument forever and that it is weak on several counts. First on the merits: The United States cannot negotiate for the French and the British, but the Soviets can readily answer that they have already offered Paris and London direct talks precisely to deal with that problem, but that both countries turned down the offer. If Paris, London, and now Washington refuse to negotiate, who is to blame? Second, it remains to be seen how long the current American answer will be viewed as a convincing argument by those in Europe, as well as in the United States, who see some justice in the Soviet contention.

During the summer 1986 negotiations between the two superpowers, the United States reportedly came very close to accepting the inclusion of French and British forces in the INF balance, leading to strong protests particularly from Mrs. Thatcher. Clearly, Moscow will reopen the issue as soon as the talks move to a final INF zero-zero deal in the aftermath of an interim agreement. Many people including political leaders and opinion makers, do unfortunately agree with Moscow that French and British weapons "are not in the moon" but that they are targeted against the USSR. Moreover, the increasingly publicized growth planned for the two European forces (at about 1200 warheads

by the late 1990s) make them no longer quite so irrelevant to the total nuclear balance (particularly if both superpowers agree to come down to 6000 warheads). Thus, the risk of increased political pressure from *within* the Alliance, leading perhaps to the marginalization of France and Britain, is quite real. In fact, the danger of their being seen by European public opinion as a whole as the sole obstacle to an "ideal" INF agreement is all the more serious given the apparently "minor" sacrifices[21] that the Soviets seem to require from Paris and London.

All this adds up to quite a formidable offensive against France and Britain, as well as European and Alliance cohesion, at the very time when both European nuclear powers have no other options (given the strategic defense race in particular), but keep on, and even accelerate, their current modernization plans.

This is precisely where the INF issue, which the Soviets so "generously" offered the United States, decouples from SDI, in fact merges once again with the defensive problem and the highly sensitive issue of the ABM Treaty's future, this time however through third country forces. Quite clearly, for both Paris and London, a freeze today will mean the extinction tomorrow of the two forces at a time when both superpowers will continue to keep thousands of atomic warheads and will go on developing their arsenals.

Not surprisingly, therefore, in their negative answers to Gorbachev's January 15 plan (dated March 3 and March 10 respectively), both Margaret Thatcher and François Mitterrand reportedly restated their conditions for their participation to nuclear negotiations. These include not only deep reductions of the superpowers' offensive arsenals but also a ban on improvement of defensive capabilities. This second condition puts both the French and British governments in line with the Soviet crusade against SDI at the very time when both countries need the support of their American ally on the inclusion issue. This precarious balance may not be maintained for very long.

In short, through the mechanism of arms control, what we now have is an even more complex equation linking not only offensive and defensive *strategic* weapons (always the case since the SALT I agreements), but also the whole question of offensive/defensive strategic weapons to INF and third country forces allied to the United States.

At some point the United States will have to choose between its own national interests as it perceives them (with or without a need to deploy ABM systems) and that of the French and British forces, whose future relevance will obviously be contingent on the kind of defensive environment they will have to face.

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[21]See, for instance, *Pravda* editorial dated February 4, 1986: "The European aspect of the Soviet nuclear disarmament plan." See also the *Novosti* reply to my column dealing with the French and British question, *Newsweek*, February 3 and March 10, 1986.

Obviously, none of the highly complex and sensitive issues discussed above is likely to find a clearcut solution in the future. Neither clever arms control fixes nor a European ATBM program are likely to resolve the issue.

What is needed instead, above and beyond skillful Alliance management, is an effort by the Europeans themselves to prepare for a future when they will have to live not just with strategic parity and Soviet superiority on their continent, but with the reintroduction of some strategic defenses on both sides and a gradual U.S. nuclear disengagement from Europe.

It is highly debatable whether flexible response, as we have known it, will survive such an evolution. It is now up to the Europeans to prepare for such a future and to plan for their joint defense accordingly.